



**Australian Government**

**Department of the Environment, Water, Heritage and the Arts**

**Senate Environment, Communications and the Arts Committee  
Inquiry into Save Our Solar  
(Solar Rebate Protection) Bill 2008 [No. 2]**

**Submission by the Australian Government Department of the Environment, Water, Heritage and the Arts**

The Department of the Environment, Water, Heritage and the Arts (DEWHA) wishes to submit the attached information relating to the Solar Homes and Communities Plan (SHCP, formerly the Photovoltaic Rebate Program) to assist the Committee in its deliberations.

**Commonwealth Support for Photovoltaic Power Systems**

The Australian Government is providing support for the use of photovoltaic technology through a number of existing and planned programs and measures, including:

- \$300 million for subsidised low-interest Green Loans of up to \$10,000 to help up to 200,000 existing householders take practical action at home from early 2009 by installing a range of renewable energy, energy efficiency and water saving products, including photovoltaic power systems.
- \$480 million for the National Solar Schools Plan in which Australian schools can install at least a 2 kilowatt photovoltaic power system and a range of energy and water efficiency measures.
- The Renewable Remote Power Generation program which provides up to 50 per cent of the cost of installing renewable energy systems, including photovoltaic power systems, for people who are not connected to a mains electricity supply.
- Renewable Energy Certificates generated by solar power systems reduce the up-front cost of installing photovoltaic power systems for all households. Additionally, the Government has committed to a target to have 20 per cent of our electricity supply powered by renewable energy by 2020 through an almost fivefold increase in the legislated national renewable energy target, creating significant opportunities for the solar power industry.

**Overview of the Solar Homes and Communities Plan**

The program was introduced to encourage the long-term use of photovoltaic technology to generate electricity from sunlight and to increase the use of renewable energy in Australia. The key objectives of the program, as articulated in the guidelines, are to:

- reduce greenhouse emissions;
- assist in the development of the Australian photovoltaic industry; and
- increase public awareness of renewable energy.

The program provides rebates to homeowners who install photovoltaic power systems on their principal place of residence, and grants to community organisations that install photovoltaic power systems for educational purposes.

### **History of Solar Homes and Communities Plan**

SHCP was launched in the 1999-2000 financial year with an initial budget \$31m over four years. There have been three subsequent extensions of the program. In May 2003 the program was extended for one year at a cost of \$9.4m. The 2004-05 Budget included an \$11.4m funding injection for the program across the 2004-05 and 2005-06 financial years. The 2006-07 Budget contained a \$150m, five-year extension to the program. This brought the total program funding to \$201.8m.

In light of the escalation in demand during 2007-08, the program's 2007-08 budget was adjusted to bring forward funding from the out-years into 2007-08 to allow all demand for rebates to be met. The adjustment was made in the additional estimates process, when the administered appropriation for the SHCP in 2007-08 was increased from \$22.7m to \$40.8m. A further \$10m was transferred to the SHCP from underspends in other programs. The 2008-09 Budget brought forward an additional \$25.6m into 2008-09, increasing the amount available under the program in this year to \$52.8m. The consequence of these changes is that the five-year program extension announced in the 2007-08 Budget has been reduced to three years of higher annual expenditure, with the overall level of funding allocated to the program in the 2007-08 extension (\$150m) remaining unchanged.

There have been several changes to the rebate structure since its commencement:

- Program initiated in 1999-2000 as part of the *A New Tax System: Measures for a Better Environment* package (\$31m over four years): Household rebate set at \$5.50 per watt up to a maximum 1.5kW providing a maximum rebate of \$8,250;
- 1 October 2000: Rebate reduced to \$5 per watt, whilst maintaining the maximum 1.5kW, providing a maximum rebate of \$7,500; Funding was brought forward from 2002-03 and 2003-04 and the program was to cease during 2001-02 on the expiration of available funding. The redesign of the program was attributed to the unexpectedly high demand. Key factors influencing the changes were “the need to moderate the demand for rebates, to institute caps on expenditure and to avoid a “stop start” effect on the program which would be detrimental to desired industry development outcomes” (source: *Environment and Heritage Portfolio Additional Estimates Statements 2000-01*)
- 2003-04 Budget: rebate reduced to \$4 per watt and a maximum of 1kW, resulting in a maximum rebate of \$4000. This rebate arrangement remained in place for four years, with funding at around \$5.7m per year;
- 2007-08 Budget: rebate increased to \$8 per watt and a maximum of 1kW, resulting in a maximum rebate of \$8000;
- 2008-09 Budget: rebate levels unchanged. Household annual taxable income means test of \$100,000 introduced.

## **Program Administration**

SHCP administration occurs in two stages: assessment against eligibility and pre-approval of an application; and, subsequent rebate payment based on submission of a valid installation report from an approved installer.

Application forms are downloaded from the DEWHA website and must be lodged by post. Applications received are logged into a tracking database and assessment commences. Applications must include an itemised quote from the supplier, which is checked to ensure that the system proposed to be installed meets relevant performance and safety standards. It also includes a declaration that the system will be installed by an accredited installer and licensed electrician.

The SHCP guidelines nominate a maximum period of six weeks for application assessment to be concluded. Pre-approval constitutes advice to the applicant that a rebate will be paid (based on the wattage capacity of the system up to 1kW and a maximum rebate of \$8000) as the application has been assessed as eligible against the guidelines.

Once pre-approval has been given, the applicant makes arrangements with the installer. The system must be installed within nine months of pre-approval being granted, after which the approval lapses. The nine month limit is an increase of three months over previous guideline requirements. The period was extended in light growth in the industry and the potential that some installers might not be able to complete installations within six months.

Following installation, the applicant submits an installation report to DEWHA. This report is completed in conjunction with the accredited installer and includes photographic evidence of the installation, electrical diagrams, electrical compliance certificate and invoice. The reports are checked to confirm that the system details are as per the original application (e.g, system size). DEWHA guidelines nominate a maximum assessment period of six weeks between receipt of installation report and payment of the rebate.

### Program guidelines – key points:

The Residential application for pre-approval must be submitted to and approved by the Program Manager before the system installation commences. A rebate will not be paid for equipment installed without pre-approval being granted.

The photovoltaic system must be installed at the applicant's (owner's) principal place of residence, as shown on the electoral roll.

To be eligible for a rebate the solar power system must be designed and installed by an accredited installer. Accreditation of installers is undertaken by the Clean Energy Council (CEC, formerly the Business Council for Sustainable Energy). Additionally, eligibility for the rebate is conditional on all the equipment in the system being new and the panel model/s having certification to either the IEC 61215 or 61646 standards.

The guidelines state that Australian Government reserves the right to change any or all of these guidelines, including to remove all or any of the guidelines or to introduce new or additional guidelines. Attached are copies of the guidelines as they stood at 1 July 2007 and following the changes to eligibility made in the 2008-09 Budget (Attachments D and E).

The guidelines have consistently stated that if the Australian Government changes or discontinues the rebate program, all applicants whose complete applications have been received before the date

of change or discontinuation will be entitled to receive the rebate at the rate applicable on that date, if they are assessed as eligible.

### Application rates

Household applications under the SHCP have been steadily increasing since the doubling of the rebate from \$4/watt to \$8/watt in the 2007-08 Budget (Attachment A). The data is presented in weekly aggregate and by state/territory. There has been an upward trend in applications since the 2008-09 Budget. The highest weekly total to date was 794 applications in the week ending 26 June 2008.

As an illustration of the growth in demand for the rebate, the following snapshot is presented:

- 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.

The SHCP funded approximately 5500 installations in the 2007-08 financial year, with an installed capacity of 7.8 MW. This represents 40% of the installed capacity over the eight year life of the program and over three times that installed in any previous financial year.

Since the introduction of the means test, the Department has been collecting additional demographic data about applicants. In particular, applicants are now asked to indicate the household income bracket into which they fall, as identified in the table below. The household income distribution of a snapshot of 1865 applications has been analysed. It demonstrates that applicants are fairly evenly distributed across the five income quintiles up to \$100,000.

**Sample of post means test applications by income category**

Taxable Income	ACT	NSW	QLD	SA	TAS	VIC	WA	NT	Total	Total %
\$0-\$20,000	1	49	30	54	1	49	18	0	202	11
\$20,001-\$40,000	3	51	71	97	1	108	47	0	378	20
\$40,001-\$60,000	8	61	61	109	1	119	55	0	414	22
\$60,001-\$80,000	11	61	61	114	1	126	63	0	437	23
\$80,001-\$99,999	13	66	59	87	3	107	99	0	434	23
<b>Total</b>	<b>36</b>	<b>288</b>	<b>282</b>	<b>461</b>	<b>7</b>	<b>509</b>	<b>282</b>	<b>0</b>	<b>1865</b>	

### Factors influencing demand

In addition to the increased level of the rebate per watt installed, there are a number of other factors that are likely to be impacting on the market.

- increased public awareness of climate change issues, possibly translating into increased preparedness at the household level to take action to reduce greenhouse gas emissions;
- since the doubling of the rebate, the emergence of new market entrants offering lower cost solar installations based on a bulk supply model delivered at the suburban/town level. Under these

arrangements, installation costs have been as low as \$1000 net of rebates/RECs for a 1kW system (ie, the out of pocket cost for the consumer has been as low as \$1000);

- the Queensland Government, through a partnership arrangement with Eco-Kinetics, is providing 1000 households with 1kW solar power systems for a price of \$8185 each, relying on the SHCP rebate. Post the \$8,000 rebate, only \$185 is to be paid by the householder; and
- the progressive introduction by the states and territories of feed-in tariff systems under which household with solar power systems are able to earn some revenue for the power they generate.

**Abatement achieved under the SHCP**

The following table estimates the total abatement achieved under the SHCP based on the \$150 million extension of the program in the 2007-08 Budget.

**Cost of Greenhouse Gas Abatement and Government Assistance per t/CO<sub>2</sub> for Solar Homes and Community Plan**

<b>Technology</b>	<b>Total CO<sub>2</sub> Abatement</b>	<b>Total Cost \$/t CO<sub>2</sub></b>	<b>Government Subsidy \$/t CO<sub>2</sub></b>	<b>Average system installation abatement</b>
Photovoltaic	0.821 mt	424	274	44 tonnes

Notes:

- A useful system life of 20 years has been used;
- Calculations are based on a 1.5kW photovoltaic system (long term average system size)

**Attachment A:** Weekly Applications Received July 2007 – July 2008

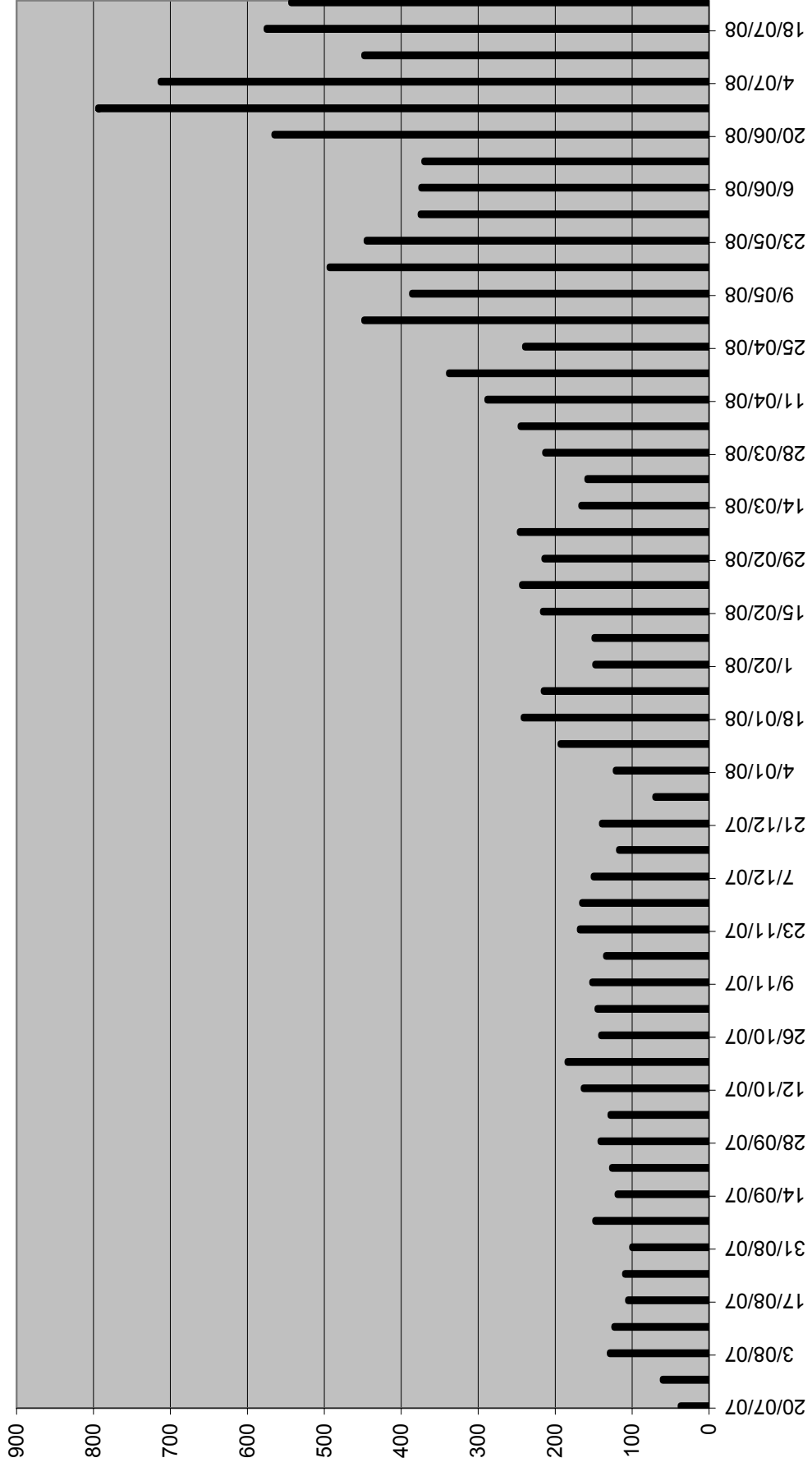
**Attachment B:** Cost/Watt and Systems Installed over Life of Program

**Attachment C:** Weekly Installation Reports Received by Jurisdiction July 2007 – July 2008

**Attachment D:** Guidelines for Residential Applicants - July 2007

**Attachment E:** Guidelines for Residential Applicants - May 2008

### Weekly Applications Received July 2007 July 2008

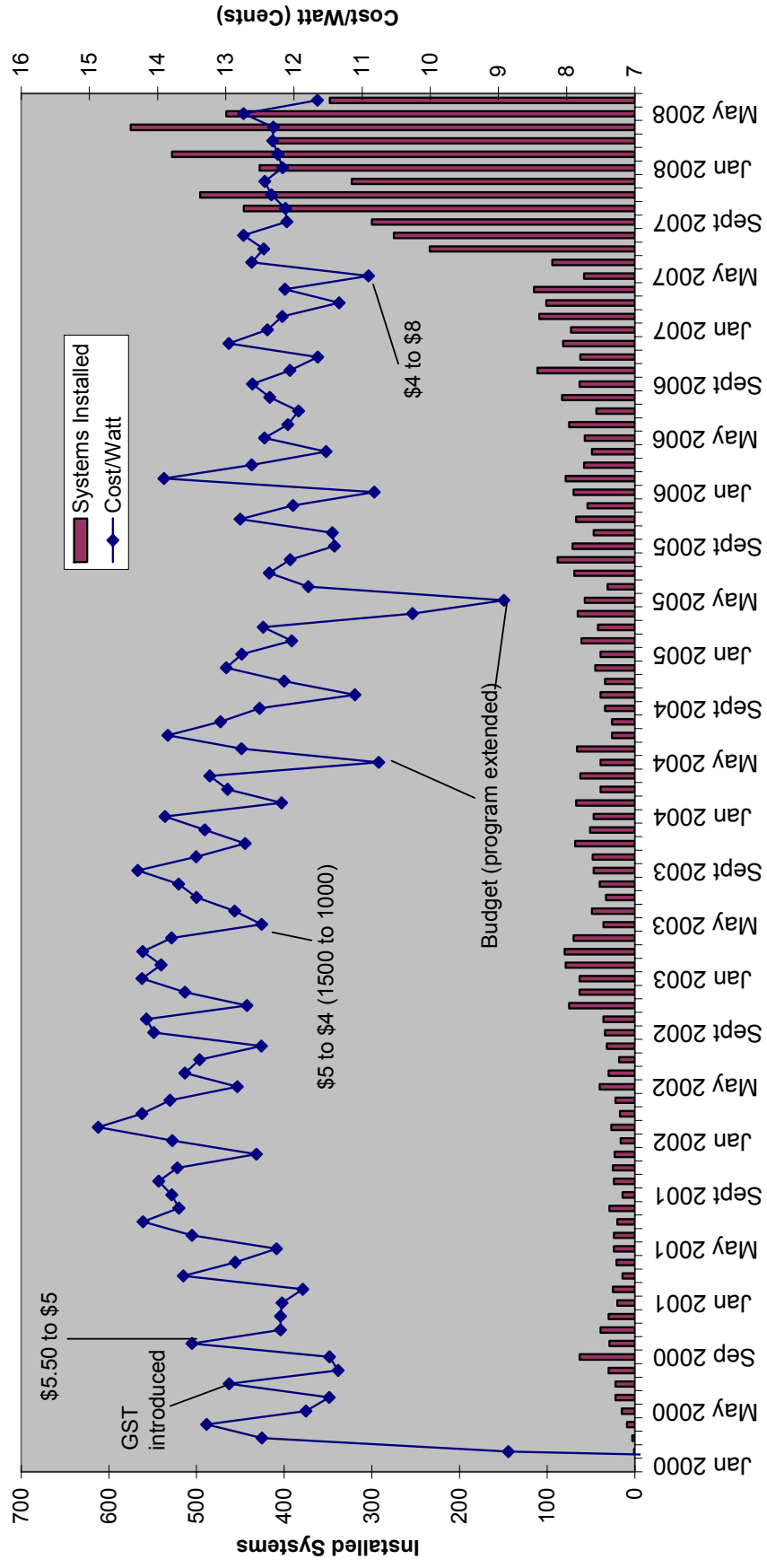


Weekly Applications Received by Jurisdiction July 2007 – July 2008

Attachment A continued

	20/07/2007	27/07/2007	3/08/2007	10/08/2007	17/08/2007	24/08/2007	31/08/2007	7/09/2007	14/09/2007	21/09/2007	28/09/2007	5/10/2007	12/10/2007
ACT	1	0	2	3	7	3	4	4	4	5	2	3	11
NSW	8	19	34	25	22	24	40	33	27	39	31	39	38
NT	0	0	0	0	0	0	0	0	0	0	0	0	0
QLD	5	9	20	14	14	20	7	15	17	21	33	22	24
SA	10	14	33	45	21	27	33	52	42	25	34	17	40
TAS	0	1	2	3	2	2	0	2	3	3	2	2	2
VIC	4	11	27	22	27	26	12	31	17	26	27	36	34
WA	9	6	11	11	12	7	4	11	9	7	11	9	14
	37	60	129	123	105	109	100	148	119	126	141	128	163
19/10/2007	26/10/2007	2/11/2007	9/11/2007	16/11/2007	23/11/2007	30/11/2007	7/12/2007	14/12/2007	21/12/2007	28/12/2007	4/01/2008	11/01/2008	
ACT	5	7	2	14	7	7	15	9	2	4	3	4	
NSW	31	40	40	25	26	52	42	40	33	38	12	40	30
NT	0	0	0	0	0	0	0	0	0	0	0	0	0
QLD	18	19	30	26	17	21	27	15	4	11	2	10	31
SA	78	36	33	38	52	39	34	27	48	52	40	24	51
TAS	5	5	6	5	3	4	3	3	1	1	1	3	3
VIC	33	24	31	34	18	38	35	46	19	26	11	25	57
WA	14	9	3	10	11	7	10	10	10	7	1	16	17
	184	140	145	152	134	168	165	150	117	139	70	121	193
18/01/2008	25/01/2008	1/02/2008	8/02/2008	15/02/2008	22/02/2008	29/02/2008	7/03/2008	14/03/2008	21/03/2008	28/03/2008	4/04/2008	11/04/2008	
ACT	6	8	2	5	5	1	6	1	2	5	8	4	1
NSW	51	36	28	32	55	36	32	59	40	31	30	56	56
NT	0	0	0	0	0	1	0	0	0	0	0	0	0
QLD	19	20	26	20	29	43	27	44	38	29	51	67	71
SA	98	83	42	36	65	88	54	60	39	35	47	43	50
TAS	0	2	1	4	3	3	4	3	4	1	0	3	2
VIC	53	44	35	39	46	51	78	51	29	44	62	48	66
WA	14	22	14	13	13	20	13	28	14	13	15	24	42
	241	215	148	149	216	243	214	246	166	158	213	245	288
18/04/2008	25/04/2008	2/05/2008	9/05/2008	16/05/2008	23/05/2008	30/05/2008	6/06/2008	13/06/2008	20/06/2008	27/06/2008	4/07/2008	11/07/2008	
ACT	11	3	22	11	68	5	6	8	3	21	19	8	3
NSW	69	39	128	58	89	63	72	65	54	67	140	68	57
NT	0	0	0	0	0	0	0	0	0	0	0	0	0
QLD	70	50	56	47	90	80	44	74	54	71	148	93	111
SA	61	49	85	79	128	92	57	40	138	104	131	143	55
TAS	5	12	0	2	2	2	1	2	1	4	24	3	4
VIC	89	54	102	111	79	120	96	140	39	215	197	271	116
WA	33	32	55	78	37	83	99	45	81	83	135	127	102
	338	239	448	386	493	445	375	374	370	565	794	713	448
18/07/2008	25/07/2008												
ACT	12	2											
NSW	92	117											
NT	0	0											
QLD	83	65											
SA	139	97											
TAS	4	5											
VIC	160	158											
WA	85	99											
	575	543											

Cost/Watt and Systems installed for On Grid Systems over life of Program.





**Cost/Watt and Systems Installed**

<b>Month / Year</b>	<b>Systems Installed</b>	<b>\$/watt</b>
Jan 2000	0	0
Feb 2000	1	\$8.85
Mar 2000	3	\$12.47
Apr 2000	9	\$13.28
May 2000	15	\$11.83
Jun 2000	22	\$11.48
Jul 2000	22	\$12.95
Aug 2000	30	\$11.35
Sep 2000	63	\$11.48
Oct 2000	29	\$13.50
Nov 2000	39	\$12.20
Dec 2000	30	\$12.20
Jan 2001	20	\$12.18
Feb 2001	25	\$11.87
Mar 2001	14	\$13.62
Apr 2001	21	\$12.86
May 2001	24	\$12.26
June 2001	24	\$13.50
July 2001	20	\$14.21
Aug 2001	29	\$13.69
Sept 2001	14	\$13.79
Oct 2001	24	\$13.98
Nov 2001	25	\$13.71
Dec 2001	23	\$12.55
Jan 2002	16	\$13.78
Feb 2002	27	\$14.87
Mar 2002	17	\$14.23
Apr 2002	22	\$13.82
May 2002	40	\$12.83
June 2002	30	\$13.60
July 2002	18	\$13.38
Aug 2002	32	\$12.48
Sept 2002	34	\$14.06
Oct 2002	36	\$14.16
Nov 2002	75	\$12.69
Dec 2002	63	\$13.60
Jan 2003	63	\$14.23
Feb 2003	79	\$13.95
Mar 2003	80	\$14.22
Apr 2003	70	\$13.79
May 2003	36	\$12.47
June 2003	49	\$12.87
July 2003	33	\$13.43
Aug 2003	40	\$13.69
Sept 2003	47	\$14.29
Oct 2003	48	\$13.43
Nov 2003	68	\$12.72
Dec 2003	51	\$13.31
Jan 2004	47	\$13.89
Feb 2004	67	\$12.18

<b>Month / Year</b>	<b>Systems Installed</b>	<b>\$/watt</b>
Mar 2004	39	\$12.97
April 2004	62	\$13.24
May 2004	39	\$10.76
June 2004	66	\$12.77
July 2004	26	\$13.85
Aug 2004	26	\$13.08
Sept 2004	34	\$12.51
Oct 2004	39	\$11.11
Nov 2004	34	\$12.14
Dec 2004	45	\$12.99
Jan 2005	39	\$12.77
Feb 2005	61	\$12.03
Mar 2005	42	\$12.45
Apr 2005	65	\$10.26
May 2005	57	\$8.92
June 2005	31	\$11.79
July 2005	69	\$12.36
Aug 2005	88	\$12.06
Sept 2005	71	\$11.40
Oct 2005	47	\$11.44
Nov 2005	67	\$12.79
Dec 2005	54	\$12.01
Jan 2006	70	\$10.82
Feb 2006	79	\$13.91
Mar 2006	58	\$12.62
Apr 2006	49	\$11.53
May 2006	57	\$12.43
June 2006	75	\$12.09
July 2006	44	\$11.93
Aug 2006	83	\$12.35
Sept 2006	63	\$12.61
Oct 2006	111	\$12.06
Nov 2006	62	\$11.65
Dec 2006	82	\$12.95
Jan 2007	73	\$12.39
Feb 2007	109	\$12.17
Mar 2007	101	\$11.34
April 2007	115	\$12.13
May 2007	58	\$10.91
June 2007	94	\$12.62
July 2007	234	\$12.44
Aug 2007	275	\$12.74
Sept 2007	300	\$12.10
Oct 2007	446	\$12.13
Nov 2007	496	\$12.33
Dec 2007	323	\$12.43
Jan 2008	428	\$12.17
Feb 2008	528	\$12.24
Mar 2008	412	\$12.31
April 2008	575	\$12.30
May 2008	465	\$12.74
June 2008	352	\$11.65
<b>Total / Average</b>	<b>9,032</b>	<b>\$12.39</b>

**Weekly Installation Reports Received by Jurisdiction July 2007 - July 2008**

**Attachment C**

	20/07/2007	27/07/2007	3/08/2007	10/08/2007	17/08/2007	24/08/2007	31/08/2007	7/09/2007	14/09/2007	21/09/2007	28/09/2007	5/10/2007	12/10/2007
ACT	0	0	0	0	0	0	0	1	2	0	7	0	2
NSW	0	0	0	0	0	0	0	0	0	0	0	0	1
NT	0	0	0	0	0	0	0	0	0	0	0	0	0
QLD	0	0	0	0	0	1	0	1	0	2	6	4	3
SA	0	0	0	0	0	1	2	1	4	3	12	2	8
TAS	0	0	0	0	0	0	0	0	0	2	0	1	0
VIC	0	0	0	0	0	1	1	2	4	5	0	3	3
WA	0	0	1	0	0	0	0	0	3	1	2	0	1
<b>0</b>	<b>0</b>	<b>0</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>4</b>	<b>6</b>	<b>13</b>	<b>13</b>	<b>27</b>	<b>10</b>	<b>18</b>
ACT	1	0	3	0	2	3	2	1	3	0	4	5	5
NSW	12	17	14	11	34	18	23	30	24	15	6	38	19
NT	0	0	0	0	1	1	0	0	0	0	0	0	0
QLD	7	5	2	11	14	10	7	7	7	9	2	12	18
SA	27	15	24	12	16	25	35	6	17	45	18	9	9
TAS	0	1	2	0	1	1	0	2	0	3	0	0	2
VIC	5	9	7	5	9	4	8	14	4	5	5	9	34
WA	5	9	2	7	8	3	10	10	4	3	0	6	11
<b>57</b>	<b>56</b>	<b>54</b>	<b>46</b>	<b>85</b>	<b>65</b>	<b>85</b>	<b>85</b>	<b>70</b>	<b>59</b>	<b>80</b>	<b>35</b>	<b>79</b>	<b>98</b>
ACT	1	5	14	6	5	3	6	2	4	2	0	9	1
NSW	11	18	11	38	18	22	49	34	35	36	18	43	45
NT	0	0	0	0	0	0	0	0	0	0	0	0	0
QLD	16	17	12	4	9	8	12	12	20	14	6	27	12
SA	23	30	24	24	51	20	33	113	47	49	29	45	40
TAS	3	1	2	0	6	0	0	5	5	1	3	1	2
VIC	10	26	7	10	13	21	25	17	29	20	22	34	31
WA	3	10	5	5	24	10	6	14	18	8	9	19	5
<b>67</b>	<b>107</b>	<b>75</b>	<b>87</b>	<b>126</b>	<b>84</b>	<b>131</b>	<b>131</b>	<b>197</b>	<b>158</b>	<b>130</b>	<b>87</b>	<b>178</b>	<b>136</b>
ACT	4	8	4	8	7	3	1	2	5	9	4	4	8
NSW	31	18	30	35	37	48	40	13	37	35	39	50	45
NT	0	0	1	0	0	0	0	0	0	0	0	0	0
QLD	24	24	23	37	19	22	47	41	16	59	46	84	40
SA	51	16	34	28	48	31	47	41	30	56	54	87	43
TAS	4	3	2	2	0	1	2	5	1	4	2	4	0
VIC	17	43	25	49	16	39	39	57	15	33	86	84	31
WA	11	12	32	11	2	13	25	14	9	21	35	22	36
<b>142</b>	<b>124</b>	<b>151</b>	<b>170</b>	<b>129</b>	<b>157</b>	<b>201</b>	<b>201</b>	<b>173</b>	<b>113</b>	<b>217</b>	<b>266</b>	<b>335</b>	<b>203</b>
ACT	13	1											
NSW	37	43											
NT	0	0											
QLD	51	38											
SA	67	68											
TAS	1	0											
VIC	45	39											
WA	27	24											
<b>241</b>	<b>213</b>												



**Australian Government**

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**Department of the Environment and Water Resources**  
**Australian Greenhouse Office**

***Photovoltaic Rebate Programme***

**Guidelines for  
Residential Applicants**

**July 2007**

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These guidelines are available electronically at [www.greenhouse.gov.au/rebates](http://www.greenhouse.gov.au/rebates)

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Australian Government

Department of the Environment and Water Resources

Australian Greenhouse Office

## Photovoltaic Rebate Programme

# Guidelines for residential applicants

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### The programme

The Australian Government introduced the Photovoltaic Rebate Programme to encourage the long-term use of photovoltaic technology to generate electricity from sunlight and to increase the use of renewable energy in Australia.

Key objectives are to:

- reduce greenhouse emissions;
- assist in the development of the Australian photovoltaic industry; and
- increase public awareness of renewable energy.

The programme can provide rebates to homeowners who install photovoltaics on their principal place of residence, and grants to community organisations and schools that install photovoltaics for educational purposes.

In the May 2007 Australian Government Budget, the programme was extended by five years to June 2012 with an additional \$150 million.

Changes to the programme primarily affect funding arrangements for schools and community buildings that are eligible for funding. Requirements for schools and community buildings are detailed in a separate document, the *Guidelines for Schools and Community Buildings*.

### The rebate

#### *For new systems*

Applicants who fully satisfy the conditions for residential photovoltaic systems will receive a rebate of \$8 per peak watt<sup>1</sup> of output of the new photovoltaic component of the system up to a maximum of \$8,000.

#### *For extensions to existing systems*

Applicants who have previously received a rebate from the Australian Government for a photovoltaic system that is smaller than one kilowatt can receive an extension rebate to bring the existing system up to a one kilowatt size.

Applicants with an existing photovoltaic system, who have never received an Australian Government rebate for that system, can receive a rebate for a one kilowatt extension to the existing system.

Applicants who fully satisfy these conditions can receive extension rebates of \$5 per peak watt of output of the new photovoltaic component of the system up to a maximum of \$5,000.

### Eligibility requirements

In order to qualify for a photovoltaic rebate, applicants must be able to demonstrate that they can comply with all the following requirements:

#### *Eligible systems*

Residential rebates are for photovoltaic systems that are connected to a main-grid or are very close to a main-grid. Any system eligible for a rebate under the Renewable Remote Power Generation Programme is ineligible for the Photovoltaic Rebate Programme, applicants should discuss which rebate to apply for with an accredited designer and installer.

Rebates will only be granted for a single system on any given residence.

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<sup>1</sup> A system's rated peak watt of output is based on the nominal peak watt rating of approved modules under standard test conditions as identified by IEC61215 or equivalent.

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A system's rated peak watt of output will be used in assessing eligibility and calculating the rebate amount. The minimum eligible amount of new photovoltaic components to be installed is 450 watt peak output, there is no maximum amount, although total rebate amounts are capped.

Equipment which does not comprise a complete photovoltaic system (defined as including new panels, new regulator, new batteries where applicable, and new inverter) will be regarded as an extension to an existing system and will attract the lower level of rebate.

A rebate will NOT be paid for equipment installed without pre-approval being granted.

#### *Installation at owner's principal place of residence*

The photovoltaic system must be installed at the applicant's (owner's) principal place of residence, as shown on the electoral roll. The Australian Government will only fund one rebate per residence. An applicant may qualify for a rebate for a new house under construction providing they can demonstrate that it will become their principal place of residence on completion.

Rebates are payable on owner occupied houses and owner occupied units within a body corporate. An owner of a unit within existing multi-unit developments may be eligible for a rebate where he or she is the owner occupier of an individual unit and will be the owner of the entire photovoltaic system.

Only one rebate will be applicable per residence. If someone buys a property which has an existing photovoltaic system for which the previous owner received a rebate for a system, the new owner will be considered the rebate recipient.

#### *Competent designer and installer*

To be eligible for a rebate the applicant must be able to demonstrate that the person who carries out the photovoltaic installation is accredited (full or provisional) for design and installation of photovoltaic systems by the Australian Business Council for Sustainable Energy. Details of accredited designers and installers are available at [www.bcse.org.au/default.asp?id=119](http://www.bcse.org.au/default.asp?id=119)

A licensed electrical contractor must carry out the electrical work associated with the wiring in the building and in the power system, in compliance with regulations in the state or territory in which the installation is undertaken.

Rebates will not be paid for systems that are designed or installed by contractors who do not meet these requirements.

#### *Equipment system design and installation requirements*

The power system equipment must be permanently mounted in a robust manner and "hard-wired" into the building's electrical circuitry.

The dwelling, and any other structures on or in the place of residence on which the power system equipment will be installed, must be structures that satisfy the local government building requirements. Written evidence of compliance may be required.

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To receive the rebate all the equipment in the system must be new and meet the relevant Australian Standards.

All systems, components and equipment must comply with, and be designed and installed in accordance with all relevant Australian Standards or, where such does not exist, with the relevant international standard. Australian Standards include, but are not limited to:

- AS/NZS 3000 – Electrical installations
- AS 4509 – Stand-alone power systems
- AS 4086 – Secondary batteries for use with stand-alone power systems
- AS 4777 – Grid connection of energy systems via inverters
- AS/NZS 5033 – Installation of photovoltaic (PV) arrays
- AS/NZS 1170 – Structural design actions; and
- any other standard called upon by the above or other relevant standards.

Photovoltaic modules must be certified to IEC61215 or equivalent.

System installation must also meet all relevant codes of practice, building codes, local government and legislative requirements.

For upgrades to existing systems, the entire system must comply with all current safety and installation requirements.

#### *Warranty*

The supplier must provide a performance statement setting out agreed load and other system parameters. A minimum ten-year performance warranty must be offered on solar panels installed as part of the system. The onus is on the new owner of the photovoltaic system to obtain a warranty from the supplier. It is in the applicant's interest, wherever possible, to seek more than one quote for the supply and installation of the system, and obtain details of the equipment in relation to the assessed load, warranty and maintenance contracts offered.

It is essential for stand alone systems, that a detailed load assessment is undertaken and the appliances to be connected are agreed in writing. Where a generator is part of the system design, the expected run time must be stated.

### **Metering and notices**

The benefits of the programme will be enhanced by the installation of metering inside the living area of the residences concerned, where occupants and visitors can readily see the impact on electricity consumption of the photovoltaic system and the appliances being used.

Installers are encouraged to offer householders the option of such metering with sensing connected to the inverter and/or the incoming mains.

Notices at the entrance to the dwelling are also recommended, advising visitors that the house is powered by solar electricity.

### **Rights reserved by the Australian Government**

Applicants should not assume that they will receive a rebate on submitting an application.

The Programme Manager has sole and absolute discretion whether an applicant is eligible for a rebate and, in particular, whether the applicant complies with the conditions and procedures set out in these guidelines.

### **Changes to programme guidelines**

The Australian Government reserves the right, at its sole and absolute discretion, and at any time, to change any or all of these guidelines, including to remove all or any of the guidelines or to introduce new or additional guidelines.

If the Australian Government does change or discontinue the Photovoltaic Rebates, all applicants whose complete applications have been received before the date of change or discontinuation will still be entitled to receive the rebate at the rate applicable on that date if they are assessed as eligible.

The Australian Government retains the flexibility to adjust the size of rebate in response to demand for the programme funds.

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## Application procedure

### *Who can apply?*

The rebate applicant must be the owner of the photovoltaic system (after installation), unless otherwise agreed with the Programme Manager in writing.

### *When should the application be lodged?*

The *Residential application for pre-approval* must be submitted to and approved by the Programme Manager before the system installation commences.

A rebate will NOT be paid for equipment installed without pre-approval being granted.

### *Pre-approval details*

The rebate applicant should complete an *Residential application for pre-approval* and send it, with all supporting documentation to:

Photovoltaic Rebate Programme Manager

Australian Greenhouse Office

Department of the Environment and Water Resources

GPO Box 787

CANBERRA ACT 2601

The accredited system designer is also required to sign the application.

As noted above, it is recommended that applicants seek more than one quote for the design, supply and installation of the system.

### *Notification of pre-approval*

Applicants will be notified in writing if the pre-approval has been granted or not within six weeks from receipt of the complete application.

The notification of pre-approval will set out any additional compliance requirements. The pre-approval will expire six months after the date it is granted.

On receipt of pre-approval, successful applicants should immediately notify their installer so that materials can be ordered and installation commenced.

### *System installation*

Systems must be commissioned and all required rebate or grant application documentation received by the Programme Manager before the expiration of pre-approval. Extensions of time for installations will not be granted.

If pre-approval expires, the applicant will be required to re-apply under the guidelines current at the time.

### *Installation reporting*

A copy of the *Residential installation report* will be sent to the applicant with the notification of pre-approval. When the system has been installed, the applicant must forward to the Programme Manager the completed *Residential installation report*, including the attachments and at least three photographs clearly showing:

- the position of the solar panel array including the building on which it is mounted;
- mounting and external cabling;
- the battery positioning, cabling and fusing (where batteries are used); and
- the inverter and control system layout.

The report shall also include:

- a basic diagram of the installation clearly showing the location of the modules, inverter and batteries with respect to the buildings, and clearly labelling each building and showing the direction of north; and
- the agreed load assessment and expected system output.

The *Residential installation report* and associated rebate claim must be signed by both the applicant and the accredited installer.

### *Payment*

Payment of a rebate will be made on receipt, by the Programme Manager, of a fully and correctly completed *Residential installation report*. Applicants can generally expect to receive their rebate within

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six weeks of the receipt of the *Residential installation report*. The Programme Manager will forward the rebate to the applicant or, where requested in writing by the applicant, to a relevant third party (e.g. the installer).

### **Applicant's rights and responsibilities**

The photovoltaic system installed is to operate on the proposed building for a minimum of five years and may be inspected (upon reasonable request) by an approved representative of the Programme Manager. During this five year period, the owner of the system, may be asked by the Programme Manager or authorised agent for information on the system's output and performance.

The rebate provided shall be repaid by the applicant if any of the conditions in the guidelines are found to have been breached during the first five years after installation of the photovoltaic equipment, It would be prudent for an owner of a system to take out appropriate insurance to cover any damage to the system (e.g. lightning strikes), as a second rebate is not payable in such instances.

### **No Commonwealth warranty**

There is no warranty given or implied by the Commonwealth on any aspect of photovoltaic systems funded through Photovoltaic Rebates and the Commonwealth accepts no representations or responsibility whatsoever for the quality of any other feature of photovoltaic systems for which rebates or grants are approved.

### **Indemnity**

The applicant acknowledges that neither the Commonwealth nor any of their authorised representatives accept any liability in respect of any claim or cause of action arising out of, or in relation to any photovoltaic system or any system that is the subject of funding assistance. The applicant agrees that he/she will indemnify and keep indemnified the Commonwealth for any claim or liability arising out of or in relation to the photovoltaic system that is the subject of this application.

### **Financial and legal impacts**

Applicants are advised to seek independent professional legal and financial advice regarding the potential impact of the rebate on their own individual circumstances.

### **Further information**

Further information on the Photovoltaic Rebate Programme is available at [www.greenhouse.gov.au/rebates](http://www.greenhouse.gov.au/rebates) or by calling the information line on **1800 808 571**.



**Australian Government**

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**Department of the Environment, Water, Heritage and the Arts**

## ***Solar Homes and Communities Plan***

# **Guidelines for Residential Applicants**

**May 2008**

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The Australian Government accepts no liability for any loss, damage or cost incurred as a result of, or arising from, reliance on this document.

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## Solar Homes and Communities Plan

# Guidelines for residential applicants

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### The program

The Solar Homes and Communities Plan encourages the long-term use of photovoltaic technology to generate electricity from sunlight and to increase the use of renewable energy in Australia.

The key objectives of the program are to:

- reduce greenhouse emissions;
- assist in the development of the Australian photovoltaic industry; and
- increase public awareness of renewable energy.

The program provides rebates to homeowners who install photovoltaic power systems on their principal place of residence, and grants to community organisations that install photovoltaic power systems for educational purposes.

### Important information

A household income means test has been introduced (see page 4). The means test came into effect at midnight on 13 May 2008 as part of the 2008-09 Federal Budget.

Requirements for community buildings are detailed in separate *Guidelines for Community Buildings*.

### The rebate

#### *For new systems*

Applicants who fully satisfy the conditions for residential photovoltaic systems will receive a rebate of \$8 per peak watt<sup>2</sup> of output of the new photovoltaic component of the system up to a maximum of \$8,000.

#### *For extensions to existing systems*

Applicants who have previously received a rebate from the Australian Government for a photovoltaic system that is smaller than one kilowatt can receive an extension rebate to bring the existing system up to a one kilowatt size.

Applicants with an existing photovoltaic system, who have never received an Australian Government rebate for that system, can receive a rebate for a one kilowatt extension to the existing system.

Applicants who fully satisfy these conditions can receive extension rebates of \$5 per peak watt of output of the new photovoltaic component of the system up to a maximum of \$5,000.

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<sup>2</sup> A system's rated peak watt of output is based on the nominal peak watt rating of approved modules under standard test conditions as identified by IEC61215 or equivalent.

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## Eligibility requirements

In order to qualify for a photovoltaic rebate, applicants must be able to demonstrate that they can comply with all the following requirements:

### *Eligible systems*

Residential rebates are for photovoltaic systems that are connected to a main-grid or are very close to a main-grid. Any system eligible for a rebate under the Renewable Remote Power Generation Program is ineligible for the Solar Homes and Communities Plan rebate., Applicants should discuss which rebate to apply for with an accredited designer and installer.

Rebates will only be granted for a single system on any given residence.

A system's rated peak watt of output will be used in assessing eligibility and calculating the rebate amount. The minimum eligible amount of new photovoltaic components to be installed is 450 watt peak output. There is no maximum amount, although total rebate amounts are capped.

Equipment which does not comprise a complete photovoltaic system (defined as including new panels, new regulator, new batteries where applicable, and new inverter) will be regarded as an extension to an existing system and will attract the lower level of rebate.

A rebate will NOT be paid for equipment installed without pre-approval being granted.

### *Means test*

Households with a taxable family income of \$100,000 or more are ineligible for the rebate.

Taxable family income is determined by combining the taxable income of the applicant and any spouse in the most recently completed tax year prior to pre approval application receipt . For the purposes of the Solar Homes and Communities Plan, spouse and taxable income have the same meaning as in the Tax Assessment Act 1997. Taxable family income does not include income earned by any other person residing at the dwelling of the applicant(s), for example, children or boarders.

Although no documentation supporting your family income is required to make an application for the rebate, you may be required to provide suitable evidence of family taxable income at a future date. Suitable evidence of taxable family income may include the respective Notice of Assessment/s produced by the Australian Taxation Office.

### *Installation at owner's principal place of residence*

The photovoltaic system must be installed at the applicant's (owner's) principal place of residence, as shown on the electoral roll. The Australian Government will only fund one rebate per residence. An applicant may qualify for a rebate for a new house under construction providing he/she can demonstrate that it will become their principal place of residence on completion.

Owner occupied houses and owner occupied units within a body corporate may be principle places of residence. An owner of a unit within an existing multi-unit development may be eligible for a rebate where he or she is the owner occupier of an individual unit and will be the owner of the entire photovoltaic system.

Only one rebate is available per residence. If someone buys a property which has an existing photovoltaic system for which the previous owner received a rebate for a system, the new owner will be considered the rebate recipient.

### *Competent designer and installer*

To be eligible for a rebate the applicant must be able to demonstrate that the person who carries out the photovoltaic installation is accredited (full or provisional) for design and installation of photovoltaic systems by the Australian Business Council for Sustainable Energy. Details of accredited designers and installers are available at [www.cleanenergycouncil.org.au/](http://www.cleanenergycouncil.org.au/)

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A licensed electrical contractor must carry out the electrical work associated with the wiring in the building and in the power system, in compliance with regulations in the state or territory in which the installation is undertaken.

Rebates will not be paid for systems that are designed or installed by contractors who do not meet these requirements.

*Equipment system design and installation requirements*

The power system equipment must be permanently mounted in a robust manner and “hard-wired” into the building’s electrical circuitry.

The dwelling, and any other structures on or in the place of residence on which the power system equipment will be installed, must be structures that satisfy the local government building requirements. Written evidence of compliance may be required.

To receive the rebate all the equipment in the system must be new and meet the relevant Australian Standards.

All systems, components and equipment must comply with, and be designed and installed in accordance with all relevant Australian Standards or, where such does not exist, with the relevant international standard. Australian Standards include, but are not limited to:

- AS/NZS 3000 – Electrical installations
- AS 4509 – Stand-alone power systems
- AS 4086 – Secondary batteries for use with stand-alone power systems
- AS 4777 – Grid connection of energy systems via inverters
- AS/NZS 5033 – Installation of photovoltaic (PV) arrays (currently under review)
- AS/NZS 1170 – Structural design actions; and
- any other standard called upon by the above or other relevant standards.

Photovoltaic modules must be tested and certified to IEC61215 or IEC61646 by a laboratory registered under the International Electrotechnical Commission’s (IEC) CB scheme to test these standards.

System installation must also meet all relevant codes of practice, building codes, local government and legislative requirements.

For upgrades to existing systems, the entire system must comply with all current safety and installation requirements.

*Warranty*

The supplier must provide a performance statement setting out agreed load and other system parameters. A minimum ten-year performance warranty must be offered on solar panels installed as part of the system. The onus is on the new owner of the photovoltaic system to obtain a warranty from the supplier.

It is in the applicant’s interest, wherever possible, to seek more than one quote for the supply and installation of the system, and obtain details of the equipment in relation to the assessed load, warranty and maintenance contracts offered.

It is essential for stand alone systems, that a detailed load assessment is undertaken and the appliances to be connected are agreed in writing. Where a generator is part of the system design, the expected run time must be stated.

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## **Metering and notices**

The benefits of the program will be enhanced by the installation of metering inside the living area of the residences concerned, where occupants and visitors can readily see the impact on electricity consumption of the photovoltaic system and the appliances being used.

Installers are encouraged to offer householders the option of such metering with sensing connected to the inverter and/or the incoming mains.

Notices at the entrance to the dwelling are also recommended, advising visitors that the house is powered by solar electricity.

## **Rights reserved by the Australian Government**

Applicants should not assume that they will receive a rebate on submitting an application.

The Program Manager has sole and absolute discretion whether an applicant is eligible for a rebate and, in particular, whether the applicant complies with the conditions and procedures set out in these guidelines.

## **Changes to program guidelines**

The Australian Government reserves the right, at its sole and absolute discretion, and at any time, to change any or all of these guidelines, including to remove all or any of the guidelines or to introduce new or additional guidelines.

If the Australian Government changes or discontinues this rebate program, all applicants whose complete applications have been received before the date of change or discontinuation will be entitled to receive the rebate at the rate applicable on that date if they are assessed as eligible.

The Australian Government retains the flexibility to adjust the size of rebate in response to demand for the program funds.

## **Application procedure**

### *Who can apply?*

The rebate applicant must be the owner of the photovoltaic system (after installation), unless otherwise agreed with the Program Manager in writing.

### *When should the application be lodged?*

The *Residential application for pre-approval* must be submitted to and approved by the Program Manager before the system installation commences.

A rebate will NOT be paid for equipment installed without pre-approval being granted.

### *Pre-approval details*

The rebate applicant should complete an *Residential application for pre-approval* and send it, with all supporting documentation to:

Solar Homes and Communities Plan Manager

Department of the Environment, Water, Heritage and the Arts

GPO Box 787

CANBERRA ACT 2601

The accredited system designer is also required to sign the application.

As noted above, it is recommended that applicants seek more than one quote for the design, supply and installation of the system.

### *Notification of pre-approval*

Applicants will be notified in writing if the pre-approval has been granted or not within six weeks from receipt of the complete application.

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The notification of pre-approval will set out any additional compliance requirements. The pre-approval will expire nine months after the date it is granted.

On receipt of pre-approval, successful applicants should immediately notify their installer so that materials can be ordered and installation commenced.

#### *System installation*

Systems must be commissioned and all required rebate application documentation received by the Program Manager before the expiration of pre-approval. Extensions of time for installations will not be granted.

If pre-approval expires, the applicant will be required to re-apply under the guidelines current at the time.

#### *Installation reporting*

A copy of the *Residential installation report* will be sent to the applicant with the notification of pre-approval. When the system has been installed, the applicant must forward to the Program Manager the completed *Residential installation report*, including the attachments and at least three photographs clearly showing:

- the position of the solar panel array including the building on which it is mounted;
- mounting and external cabling;
- the battery positioning, cabling and fusing (where batteries are used); and
- the inverter and control system layout.

The report shall also include:

- a basic diagram of the installation clearly showing the location of the modules, inverter and batteries with respect to the buildings, and clearly labelling each building and showing the direction of north; and
- the agreed load assessment and expected system output.

The *Residential installation report* and associated rebate claim must be signed by both the applicant and the accredited installer.

#### *Payment*

Payment of a rebate will be made on receipt, by the Program Manager, of a fully and correctly completed *Residential installation report*. Applicants can generally expect to receive their rebate within six weeks of the receipt of the *Residential installation report*. The Program Manager will forward the rebate to the applicant or, where requested in writing by the applicant, to a relevant third party (e.g. the installer).

### **Applicant's rights and responsibilities**

The photovoltaic system installed is to operate on the proposed building for a minimum of five years and may be inspected (upon reasonable request) by an approved representative of the Program Manager.

During this five year period, the owner of the system, may be asked by the Program Manager or authorised agent for information on the system's output and performance.

The rebate provided shall be repaid by the applicant if any of the conditions in the guidelines are found to have been breached during the first five years after installation of the photovoltaic equipment,

It would be prudent for an owner of a system to take out appropriate insurance to cover any damage to the system (e.g. lightning strikes), as a second rebate is not payable in such instances.

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## **No Commonwealth warranty**

There is no warranty given or implied by the Commonwealth on any aspect of photovoltaic systems funded through the Solar Homes and Communities Plan and the Commonwealth accepts no representations or responsibility whatsoever for the quality of any other feature of photovoltaic systems for which rebates or grants are approved.

## **Indemnity**

The applicant acknowledges that neither the Commonwealth nor any of their authorised representatives accept any liability in respect of any claim or cause of action arising out of, or in relation to any photovoltaic system or any system that is the subject of funding assistance. The applicant agrees that he/she will indemnify and keep indemnified the Commonwealth for any claim or liability arising out of or in relation to the photovoltaic system that is the subject of this application.

## **Financial and legal impacts**

Applicants are advised to seek independent professional legal and financial advice regarding the potential impact of the rebate on their own individual circumstances.

## **Further information**

Further information on the Solar Homes and Communities Plan is available at [www.environment.gov.au/rebates](http://www.environment.gov.au/rebates) or by calling the information line on **1800 808 571**.

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