Answers to questions on notice

Environment, Water, Heritage and the Arts portfolio

Supplementary Budget Estimates, October 2008

Outcome: 1 Question No: 49

Output: 1.1

Division/Agency: REED

Topic: Solar Homes: Installation

Hansard Page ECITA: 93 (21 Oct)

Senator Milne asked:

If we can just go back to the 12,000 applications, how many have been processed and paid?

Answer:

As at 18 November over 3,600 Solar Homes and Communities Plan applications have been processed and paid during this financial year.

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Environment, Water, Heritage and the Arts portfolio

Supplementary Budget Estimates, October 2008

| Outcome: | 1 | Question No: | 50 |
|---------------------|---|---------------------|----|
| Output: | 1.1 | | |
| Division/Agency: | REED | | |
| Topic: | Solar Homes – recommendation of training places | | |
| Hansard Page ECITA: | 94 (21 Oct) | | |

Senator Milne asked:

So with this issue of capacity constraint, which I think is highly significant right across Australia, the Prime Minister announced recently as part of the financial stimulus package opportunities for training and so on. What role does your department have or what capacity does it have to make recommendations in terms of where some of those training places might need to go in order that this installation rate, which is effectively what we are talking about, can be lifted?

Answer:

Through the Low Emissions Technology Abatement – Renewables Program and the Renewable Remote Power Generation Program, the Department of the Environment, Water, Heritage and the Arts (DEWHA) has funded several projects to increase the capacity for TAFE colleges and other Registered Training Organisations to provide renewable energy training. DEWHA funded projects include:

- Mamabulanjin Aboriginal Corporation Renewable Energy Training System;
- Centre for Appropriate Technology Indigenous Remote Area Power System Servicing Training;
- Bushlight Renewable Energy System Installer Training;
- Queensland TAFEs Renewable Energy Training Trailers;
- Renewable Energy Trainers Network;
- Renewable Energy Industry Training;
- SA TAFE Expansion of Renewable Energy Educational Resources;
- Canberra Institute of Technology Renewable Energy Training Trailer;
- Expanding Bushlight Information and Training Resources for Australian Industry;
- Photovoltaic Standards Training for Installers;
- Renewable Energy Training Enhancement Australia;
- University of SA Sustainable Energy Centre.

On 14 October 2008, the Prime Minster announced that the government would invest \$187 million to create an additional 56,000 new training places this financial year to help

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keep the economy strong during the global financial crisis. These new places will be delivered through the Productivity Places Program managed by the Department of Education, Employment and Workplace Relations (DEEWR) and will take the government's total commitment to the Productivity Places Program to more than \$2 billion with more than 700,000 new training places created over five years.

A discussion paper was released on the Productivity Places Program on 1 April 2008. More than 100 responses were received and provided feedback to the Australian Government about the proposed architecture and implementation arrangements for the then 630,000 additional training places to be delivered through the Productivity Places Program. Stakeholders were able to make submissions on the issues raised in the paper up until April 2008.

The Productivity Places Program provides training places for industries experiencing skill shortages. It includes the Certificate IV in renewable energy for electricians. DEEWR identifies the priority occupations, informed by advice from Skills Australia and taking into account the experience from the initial phases of the program and consultations with Industry Skills Councils and other stakeholders.

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| Outcome: | 1 | Question No: | 51 |
|---------------------|--|---------------------|----|
| Output: | 1.1 | | |
| Division/Agency: | REED | | |
| Topic: | Renewable Remote Power Generation Program – small rebate sub-programs | | |
| Hansard Page ECITA: | 96 (21 Oct) | | |

Senator Milne asked:

In terms of the technologies that are benefiting from the program, how much is going to solar PV and how much is going to solar concentrations and so on?

Answer:

To the end of June 2008, the small rebate sub-programs of the Renewable Remote Power Generation Program (RRPGP) have supported the installation of 7,776 kilowatts of photovoltaics, 298 kilowatts of wind turbines and 60 kilowatts of micro-hydro and associated enabling equipment. Some stand-alone power systems incorporate more than one form of renewable generation and thus it is not straightforward to specify the percentage of photovoltaic systems. However, it is accurate to say that more than 95 per cent of the small, stand-alone power systems supported incorporate photovoltaics.

A summary table of the RRPGP Major Projects supported is provided in response to Question 52.

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| Outcome: | 1 | Question No: | 52 |
|---------------------|---|---------------------|----|
| Output: | 1.1 | | |
| Division/Agency: | REED | | |
| Topic: | Renewable Remote Power Generation Program – Large Projects | | |
| Hansard Page ECITA: | 96 (21 Oct) | | |

Senator Milne asked:

Are you able to give me any indication of what they are? The ones that have been approved.

Answer:

As at 17 November 2008, the Australian Government has approved 29 Renewable Remote Power Generation Program Major Projects. The 26 Major Projects that have been announced are listed in the following table.

| | Renewable Remote Power Generation Program Major Projects - Summary Table | | | Rebate | Total Project cost | L Diesel |
|----|---|--------------------------------------|-------------------------|--------------|--------------------------|----------------|
| | | Location | Туре | up to \$m | \$m | Saved pa |
| WA | 1 | Esperance | 3.6 MW Wind | 5.320 | 10.640 | 2,000,000 |
| | 2 | Rottnest | 0.6 MW Wind | 1.925 | 4.600 | 430,000 |
| | 3 | Hopetoun | 0.6 MW Wind | 1.340 | 2.680 | 408,000 |
| | 4 | Bremer Bay | 0.6 MW Wind | 1.600 | 5.204 | 340,000 |
| | 5 | Kalbarri | 1.6 MW Wind | 1.900 | 3.800 | fringe-of-grid |
| | 6 | Denham | 0.3 MW Wind | 0.765 | 1.709 | 230,000 |
| | 7 | Hopetoun II | 0.6 MW Wind | 1.034 | 2.412 | 220,000 |
| | 8 | Coral Bay | 0.825 MW Wind | 2.760 | 9.660 | 440,000 |
| | 9 | Denmark | 1.8 MW wind | 1.400 | 2.800 | fringe-of-grid |
| NT | 10 & 11 | Kings Canyon & Bulman | 0.28 MW PV | 1.260 | 3.516 | 158,000 |
| | 12, 13, & 14 | Hermannsburg, Yuendumu & Lajamanu | 0.72 MW Conc Dish PV | 3.425 | 6.850 | 430,000 |
| | 15 | Bradshaw | 0.112 MW PV | 1.204 | 2.858 | 291,500 |

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| | enewable Remote Power Generation Program | | | Rebate | Total Project | |
|-----------------------|--|---------------------------|---------------------------|--------------|------------------|----------------------|
| Aajor Project | s - Summai | y Table Location | Туре | up to \$m | cost \$m | L Diesel Saved pa |
| | 16 & 17 | Ti-tree and Kalkaranji | 0.56 MW conc solar | 4.560 | 9.120 | 300,000 |
| | 18 | Alekerange | 0.84 MW conc solar | 4.368 | 6.240 | displaces gas |
| | 19 | Alice Springs Crown Plaza | 0.305 MW PV | 1.540 | 3.080 | displaces gas |
| SA | 20 | Coober Pedy | 0.910 MW conc PV | 3.550 | 7.100 | 520,000 |
| | 21 | Umuwa Upgrade | 0.110 MW conc PV | 0.563 | 1.126 | 140,000 |
| Tas | 22 | King Island | 1.7 MW Wind | 1.910 | 3.820 | 1,065,000 |
| | 23 | King Island | 100 kW tracking PV | 0.720 | 1.440 | 60,000 |
| | 24 | Cape Barren Island | 40 kW Wind & 3 kW PV | 0.442 | 1.264 | 34,000 |
| Island Territories | 25 | Cocos (Keeling) Island | 80 kW Wind | 0.502 | 3.500 | 50,000 |
| Antarctica | 26 | Mawsons Base | Hydrogen Demonstration | 0.750 | 0.850 | 700 and some |
| | | | TOTALS | 42.838 | 94.269 | 7,117,200 |

Notes:

1. Total project costs can include new diesel generators and other infrastructure costs which are not eligible for Renewable Remote Power Generation Program funding.

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| Outcome: | 1 | Question No: | 53 |
|---------------------|---|---------------------|----|
| Output: | 1.1 | | |
| Division/Agency: | Renewables and Energy Efficiency | | |
| Topic: | Renewable Remote Power Generation Program – applications beyond budget | | |
| Hansard Page ECITA: | 97 (21 Oct) | | |

Senator Milne asked:

So when I asked you before about funding demand and whether you were on track and so on, obviously on track to spend the money, albeit \$42 million less than might have been expected. In terms of applications, how many are you refusing because it would take you beyond budget? How many of those are there?

Answer:

One application did not receive funding under the national Renewable Remote Power Generation Program – Major Projects sub-program due to the funding being committed. The national Major Project sub-program was suspended on 27 October 2008 and the department is no longer accepting applications.

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| Outcome: | 1 | Question No: | 54 |
|---------------------|---------------------------|---------------------|----|
| Output: | 1.1 | | |
| Division/Agency: | REED | | |
| Topic: | Green Loans – assessments | | |
| Hansard Page ECITA: | 99 (21 Oct) | | |

Senator Birmingham asked:

How many assessments is the Department planning on in the first year of the program? How many assessors currently exist?

Answer:

In the 2009 calendar year, the department is planning to provide around 52,000 assessments. The actual number of assessments undertaken will depend upon:

- The demand for assessments from the public
- The availability of trained and registered assessors
- The average costs of assessment services to the Department.

There are several thousand people providing sustainability assessment services of various types in Australia, although none have yet been through the Green Loans specific training program. The department has been working with the Association of Building Sustainability Assessors to develop a comprehensive training package which is now complete and training is progressively being rolled out from late 2008. Training is expected to be delivered nationally by a variety of industry recognised training providers and Registered Training Organisations. Pilot training for assessors will occur from December 2008 to February 2009 and we aim to have some 600 potential assessors undertake the training in that period. The department has budgeted to support the training of up to 2,000 assessors across the five years of the program.

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Environment, Water, Heritage and the Arts portfolio

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| Outcome: | 1 | Question No: | 55 |
|---------------------|------------------------------------|--------------|----|
| Output: | 1.1 | | |
| Division/Agency: | REED | | |
| Topic: | Green Loans – estimates of program | | |
| Hansard Page ECITA: | 99 (21 Oct) | | |

Senator Birmingham asked:

There is a statement on the department's website about the Green Loans Program that says: "This innovative program will help an estimated 200,000 home owners to reduce annual greenhouse gas emissions by around 600,000 tonnes of carbon dioxide equivalent per year by 2020." How is that estimation made?

Answer:

The Australian Government has estimated the greenhouse gas emission abatement impact of the program to be 0.6 million tonnes per year by the conclusion of the five year program, with an impact of over 15 million tonnes over the effective life of the expected actions taken by the households.

The range of actions taken by households under the Green Loans program will vary according to the individual house and household circumstance. Abatement calculations are based on a conservative estimate of the types and quantities of actions undertaken by households engaged over the life of the program. The range of actions considered in the abatement calculations include:

- Ceiling insulation (120,000 homes)
- Wall insulation (40,000 homes)
- Solar and other high performance hot water systems (100,000 homes)
- Window films and shading devices (50,000 homes)
- Draft proofing (80,000 homes)
- CFL and LED lighting (100,000 homes)
- High performance appliances (100,000 homes)
- Photovoltaic panels (50,000 homes).
- User behaviour changes (90,000 homes)

The actual level of abatement achieved will depend on the product choices taken by estimated 200,000 households who take out Green Loans, while additional abatement is expected to be achieved through actions undertaken by households who have received a Household Sustainability Assessment but choose not to take out a Green Loan.

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| Outcome: | 1 | Question No: | 56 |
|---------------------|----------------------------------|---------------------|----|
| Output: | 1.1 | | |
| Division/Agency: | Renewables and Energy Efficiency | | |
| Topic: | Green Loans – Energy Savings | | |
| Hansard Page ECITA: | 99 (21 Oct) | | |

Senator Birmingham asked:

It sounds as if you have done some reasonable modelling. If you could on notice provide that information as to the energy savings estimated under the program and therefore carbon emission reductions estimated under the program, that would be appreciated.

Answer:

Please see the response to Question 54 for estimated carbon emission reductions.

The energy saving is estimated at approximately 2.19 PJ or 609 gWh. The actual level of energy saving achieved will depend on many factors including:

- a. The greenhouse intensity of the energy source(s) used by the participants.
- b. The product choices undertaken by the up to 200,000 households who may take out Green Loans.
- c. The actions undertaken by households who have received a Household Sustainability Assessment supported by the program but choose not to enter into a Green Loan.

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Environment, Water, Heritage and the Arts portfolio

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| Outcome: | 1 | Question No: | 57 |
|---------------------|---|---------------------|----|
| Output: | 1.1 | | |
| Division/Agency: | Renewables and Energy Efficiency | | |
| Topic: | Solar and Geothermal Schools Program | | |
| Hansard Page ECITA: | Written Question on Notice | | |

Senator Birmingham asked:

Is the Department giving consideration to the inclusion of Geothermal Heat Pumps in the Solar and Geothermal Schools Program?

Answer:

The National Solar Schools Program does not fund the installation of new or the replacement of existing space heating appliances. As such, the department is not considering including geothermal heat pumps as an eligible measure under the program.

The focus of the program in this area is on funding measures such as ceiling, wall and floor insulation, external awnings and ceiling fans which improve both the heating and cooling energy efficiency of schools.

The list of eligible measures under the program comprises those which are the most efficient and cost effective for use in schools. The list may be reviewed and updated over the life of the program to take into consideration developing technologies.

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| Outcome: | All | Question No: | 58 |
|---------------------|---|--------------|----|
| Output: | All | | |
| Division/Agency: | REED/CSD | | |
| Topic: | Energy Efficiency – outsourced machines | | |
| Hansard Page ECITA: | Written Question on Notice | | |

Senator Birmingham asked:

- 1. What is the cost of the requirement that new machines supplied as part of the Department's technology outsourcing meet or exceed the Government's Energy Star specifications for power consumption?
- 2. What reaction has met the introduction of this requirement?
- 3. What assessment, if any, is being undertaken of the benefits of this requirement?
- 4. Will this be used as a model to be applied across all of government?

Answers:

- 1. Until a decision has been taken on the department's Request for Tender (RFT) in relation to its outsourced IT services the department is not in a position to provide specific details. Any information provided as part of the RTF process is Commercial-in-Confidence.
- 2. Please see the response to Part 1. In general the response to the RFT has been very positive.
- 3. Please see the response to Part 1. When the tender process is complete the department will undertake an assessment of the costs and benefits arising from the environmental requirements of the RFT.
- 4. At this stage no decision has been taken on the wider application of these requirements.