



LEGISLATIVE ASSEMBLY FOR THE AUSTRALIAN CAPITAL TERRITORY

STANDING COMMITTEE ON CLIMATE CHANGE, ENVIRONMENT AND WATER

Meredith Hunter MLA (Chair), John Hargreaves MLA (Deputy Chair), Zed Seselja MLA

Supplementary Questions

Minister for the Environment, Climate Change and Water

Minister for Energy

No.	Page/s of Report	Topic	Supplementary Question
1.	108	Grey water management	a) Has the Department undertaken an evaluation of providing non-potable water at a household level in new developments, beyond the requirement for new houses to be plumbed to be grey water already? b) Will the <i>ThinkWaterActWater</i> review include any assessment of the value of onsite grey water treatment for residential houses? If so, what will be the extent of that consideration? c) Will the <i>ThinkWaterActWater</i> review include any assessment of the value of onsite grey water treatment at a precinct level to service residential areas? If so, what will be the extent of that consideration? d) Which other departments has DECCEW liaised with in regard to possible new programs or technologies for grey water management?
2.		GreenPower	What has been the increase in subscriptions to Green Power as a result of the change in policy that requires energy retailers to first offer Green Power to new account holders?
3.	106	Strategic Indicator 3 – Community awareness of climate change	a) What studies has the Department drawn upon to investigate the Canberra community's awareness of climate change? b) Has the Department developed a set of baseline indicators to measures any change in the community's awareness of climate change? If so, what are those indicators? If not, how will the Department evaluate the overall effectiveness of the community's awareness of climate change?

No.	Page/s of Report	Topic	Supplementary Question
4.	106	World Environment Day	a) How many community groups were represented at the World Environment Day event? b) How much did the WED event cost? c) Was there any evaluation of the event, and if so, what were the outcomes?
5.		Energy efficiency	a) Does the Department have access to any data on the energy efficiency status of houses in the ACT? b) If so, what form does that data take and can it be made available? c) Does any other Department have access to this data? d) If no ACT Departments have access to this data, on what basis does the Government measure the potential to increase home energy efficiency? e) If no data exists for the energy efficiency of houses in the ACT, is the Government planning any kind of auditing prior to launching its energy efficiency strategies? f) What reasons are there for not undertaking to develop this data (if the Government does not expect to develop the data) ?
6.	2	40 per cent reduction target in greenhouse gas (GHG) emissions	a) How many tonnes of GHG emissions did the ACT emit in 1990? b) How many tonnes of GHG emissions will the ACT be emitting in 2020 for it to reach the 40 per cent reduction target? c) Could the Minister outline for the Committee the strategy that the Government will employ to reduce the ACT's emission to 40 per cent below 1990 levels? d) What is the estimated cost for each? e) How much does the Government spend on monitoring emissions each year? How many staff are involved?

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7.	3	Energy use in the ACT	a) What is the energy usage per year per household in the ACT, and what is the average electricity Bill per household? b) How much of that is from Greenpower? c) What is the average cost per kilowatt of that Greenpower? d) 63 per cent of the ACT's emissions are from energy production, of this amount, how much is from coal-fired power stations, and how much is from gas-fired power stations? e) What is the cost differential between coal power, gas power, solar power and wind power in terms of cents per kilowatt hour?
8.	7	ACT Solar Facility	a) How much had been spent by the Department on the expression of interest process? b) What consultants had been engaged?
9.	6	Solar Feed-in Tariff	a) How many, and what size systems have been installed by home owners under the Feed in tariff scheme? b) How many homes are now connected to the Feed-in tariff scheme? Please provide information broken down by individual suburb – how many homes are connected in each suburb? c) How many Kilowatt hours per year would have to be generated by the scheme for the 6 per cent target to be met? How will this be split between large scale, medium scale and micro generation? d) What is the total demand for electricity in the ACT each year in terms of kilowatt hours? e) Under the scheme, for each part of the programme – large scale, medium scale and micro – how much per kilowatt hour of electricity produced will each generator receive according to current estimates? f) How much will all producers in the scheme receive each year based on current estimates? Surely the

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			Department has calculated this if the Government has agreed to this policy g) How many jobs have been created in the ACT from the scheme to date? h) Why did the NSW solar feed-in scheme fail? i) In her press release relating to the rehashed NSW scheme of 27 October 2010, the Premier of NSW noted that since 2009 there has been a flood of cheaper panels from China and Spain. Has this been the experience in the ACT? j) The Government recently announced that it would change the solar feed in tariff to accommodate large scale production. What cost in terms of cents per kilowatt hours does the Government expect that large scale producers of solar power will ask for? k) Where does the Government expect medium scale production to take place? l) How will the Government ensure that base-load power is still available during the colder winter months when solar power will not be as effective, especially during the peak times after 5.30 when people are arriving home from work and demand for energy is the highest?
10.	32	Appropriations	The Department was appropriated \$23 million in 2009-10 and it only drew down \$20.5 million. Why has the Department not drawn down the full amount of its appropriation?
11.	6	Action Plan 2	What measures is the department putting in place to ensure that Weathering the Change Action Plan 2 will be released for public consultation in the first quarter next year and will be finalised by the middle of next year?
12.	106	Action Plan 1	a) What is the reporting process on the status of all actions and initiatives listed as ongoing in the <i>ACT Climate Change Strategy: Weathering the Change</i> Action Plan 1 Review? b) When will the next progress report be publically available? c) For the actions and initiatives which have “Not Applicable” listed in the Effectiveness and Efficiency columns (in the Action Plan 1 Review), will you be developing means to start measuring these indicators and reporting on the outcomes in Action Plan 2? ☺

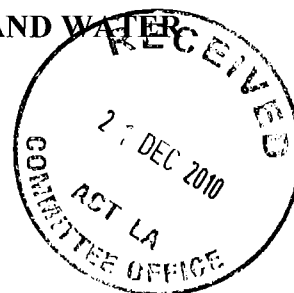
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13.		Budget allocation	The 2008-09 Budget noted the allocation of \$242 million over years 2007-08 till 2012-13 to address climate change – how much of this allocation has been spent and what has been achieved in terms of greenhouse gas abatement?
14.	109	Carbon neutrality of Government operations	a) When will the framework for ACT Government Carbon Neutrality be released? Will it be subject to public consultation? b) Will the framework only cover GHG emissions or the carbon footprint or will it also include sustainability across Government operations – i.e. water use, waste generation, impacts on biodiversity?
15.		Carbon neutrality of Government operations	a) The Minister indicated that there would be some form of Whole-of-Government reporting and review of ACT Government operations - can more information be provided on what this might entail? b) All agencies have included their ESD data in the most recent annual report. Has any collation of this data been undertaken? c) Are emissions from ACT Government operations increasing or decreasing? d) What were the emissions from ACT Government operation for 2009-190 and for 2008-09?
16.		Carbon budgets	Will the carbon budgets proposed apply simply to the “carbon footprint” of the operations of Government agencies or will they also apply to services and programs managed by the agency?
17.		Role of the Commissioner for Sustainability and the Environment	Given it may be some time before the Government considers the three reports prepared by the Office of the Commissioner for Sustainability and Environment on its expanded role can these reports be publicly released now?
18.		Legislation before the Assembly	Can the Minister please provide to the Assembly a timetable of when major environment legislation is likely to come before the Assembly over the next two years?

**MINISTER FOR THE ENVIRONMENT, CLIMATE CHANGE AND WATER
MINISTER FOR ENERGY**

**STANDING COMMITTEE ON CLIMATE CHANGE, ENERGY AND WATER
INQUIRY INTO THE 2009-10 ANNUAL REPORT**

SUPPLEMENTARY QUESTION ON NOTICE

Grey Water Management



The Committee - Asked the Minister for the Environment, Climate Change and Water:

- a) Has the Department undertaken an evaluation of providing non-potable water at a household level in new developments, beyond the requirement for new houses to be plumbed to be grey water already?
- b) Will the *Think Water Act Water* review include any assessment of the value of onsite grey water treatment for residential houses? If so, what will be the extent of that consideration?
- c) Will the *Think Water Act Water* review include any assessment of the value of onsite grey water treatment at a precinct level to service residential areas? If so, what will be the extent of that consideration?
- d) Which other departments has DECCEW liaised with in regard to possible new programs or technologies for grey water management?

Mr Corbell - The answer to the Member's question is as follows:

- a) Individual property level amendments have been made to the *Water and Sewerage Regulations 2001* to provide for the separation of grey water in domestic premises to the edge of the floor slab. New developments are also required to install 'provisional water pipes' to toilets, washing machines and an external point to allow for future use of either grey water or rainwater.

In respect of non-potable water to households, both the ACT Planning and Land Authority (ACTPLA) and ACTEW have undertaken research on a water management strategy for the Molonglo Valley development, particularly with respect to the options to utilise recycled water. Studies have examined the water savings and related costs from the Lower Molonglo Water Quality Control Centre (LMWQCC) and this will be further investigated as part of the review of *Think water, act water*.

ACTPLA and DECCEW have also been investigating other sources of non-potable water for the Molonglo development, including utilising stormwater which is considered a feasible option and is potentially cheaper than using recycled water. Stormwater application has been identified for potentially watering new open spaces (parks and sportsfields) in Molonglo.

The issue of urban water management, for all new developments, will be addressed in the current review of the *Think water, act water* strategy through a much broader ranging study and evaluation of non-potable water management. The study will attempt to define water recycling

in the context of the ACT being an inland city and make a full assessment of the imperative for water recycling in securing a safe, efficient and sustainable water supply for the ACT, given:

- future demand forecasts and climatic conditions;
- the relative cost of water recycling;
- public perceptions of recycling;
- existing and planned potable water supply arrangements; and
- relevant legislation and inter-governmental water arrangements including the Murray-Darling Basin Agreement.

- b) The current review of *Think water, act water* will encompass the issue of urban water management at its broadest level. This will include grey water treatment for residential houses.

Grey water systems are largely site-specific and the issues associated with them can vary in their complexity. As such, consideration of the value of onsite grey water treatment for residential houses will include:

- the relative value of onsite grey water treatment in the larger context of urban water management;
- the relatively high costs of these systems, their installation and required maintenance or servicing costs. Grey water systems require a regular usage and maintenance regime;
- the difficulty of obtaining qualified tradesmen to install and maintain such systems;
- the need to ensure how and where the grey water is used on a block; and
- health issues related to potential impacts and effects on humans, soils and plants.

- c) The current review of *Think water, act water* will encompass the issue of urban water management at its broadest level. This will include grey water treatment for residential houses and any potential broader applications.

Grey water systems are largely site-specific and the issues associated with them can vary in their complexity. This complexity increases when you extend the potential application of treatment to a precinct level. As such consideration of the value of onsite grey water treatment at a precinct level for residential houses will include issues associated with such a broad-scale application, as well as those associated with individual residential applications outlined above.

- d) DECCEW, being responsible for the Secretariat of the Senior Executives Water Group (SEWG), regularly liaises with all other departments on any water-associated issues affecting the ACT, including new programs and technologies. The SEWG comprises representatives from Senior Executives across all ACT Departments.

There has been no formal liaison with other departments over recent months in respect of grey water management. However, agencies will be consulted through SEWG as part of the *Think water, act water* review encompassing the much broader issue of urban water management.

Approved for circulation to the Standing Committee and incorporation in Hansard.



Simon Corbell MLA

Minister for the Environment, Climate Change and Water

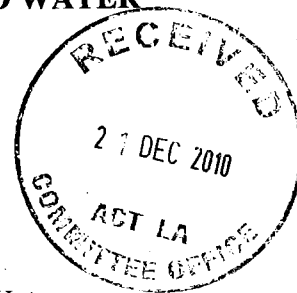
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SUPPLEMENTARY QUESTION ON NOTICE

GreenPower



The Committee - Asked the Minister for the Environment, Climate Change and Water:

What has been the increase in subscriptions to Green Power as a result of the change in policy that requires energy retailers to first offer Green Power to new account holders?

Mr Corbell - The answer to the Committee's question is as follows:

Figures for GreenPower usage in the ACT show that from 1 April 2009, when electricity retailers in the ACT were required to offer customers GreenPower, to 30 June 2010, there has been a 30 per cent increase in residential customers and a 32 per cent increase in commercial customers.

This increase in subscriptions represents the continuation of an increase in the trend of new customers subscribing to GreenPower that began in the third quarter of 2008. There is insufficient information currently available to determine if the policy change is the only influence on the uptake of GreenPower.

Approved for circulation to the Standing Committee and incorporation in Hansard.

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Simon Corbell MLA

Minister for the Environment, Climate Change and Water

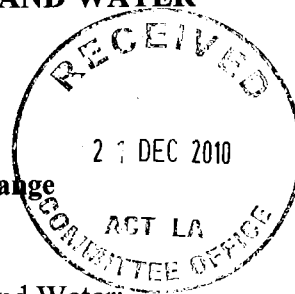
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SUPPLEMENTARY QUESTION ON NOTICE

Strategic Indicator 3 - Community Awareness of Climate Change



The Committee - Asked the Minister for the Environment, Climate Change and Water:

a) What studies has the Department drawn upon to investigate the Canberra community's awareness of climate change?

b) Has the Department developed a set of baseline indicators to measure any change in the community's awareness of climate change? If so, what are those indicators? If not, how will the Department evaluate the overall effectiveness of the community's awareness of climate change?

Mr Corbell - The answer to the Member's question is as follows:

a) The Government undertook public consultation through "Time to Talk Canberra 2030".

b) No. Community awareness is an issue to be addressed in *Weathering the Change* Action Plan 2.

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Simon Corbell MLA

Minister for the Environment, Climate Change and Water

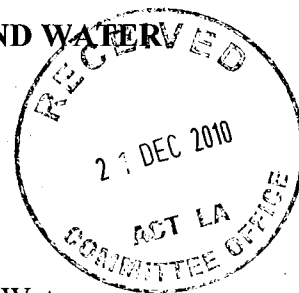
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SUPPLEMENTARY QUESTION ON NOTICE

World Environment Day



The Committee - Asked the Minister for the Environment, Climate Change and Water:

- a) How many community groups were represented at the World Environment Day (WED) event?
- b) How much did the WED event cost?
- c) Was there any evaluation of the event, and if so, what were the outcomes?

Mr Corbell - The answer to the Committee's question is as follows:

- a) Ten stalls were set up to provide information and advice on a range of environment related topics. Of these, three were community groups – the Conservation Council, Greening Australia and SEE Change.
- b) The event cost the Department of the Environment, Climate Change, Energy and Water \$24,197.
- c) As a public event in Garema Place, the World Environment Day event was an helpful vehicle for raising community awareness of climate change. An evaluation of the WED event was undertaken and feedback from attendees and stallholders was extremely positive. Most stall organisers spoke to or assisted over 30 customers during the three hour event. No stall organisers spoke to less than 20 customers.

1000 plants were given away to ACT residents who attended the event. Plants were sourced through Yarralumla Nursery and were a feature of the day. In addition, approximately 1900 Yellow Bottlebrush seedsticks were given out to encourage participants to plant native shrubs in their garden.

Approximately 500 seed balls were made by participants during the event (conducted by Greening Australia) and over 670 water bottles (primarily donated by DECCEW and ACT Health) were handed out, assisting in the reduction of plastic water bottles at landfill.

ActewAGL gave away 1000 'enviro bags' which included energy efficient light bulbs and water saving tools such as an ice scraper. During the three hour event other ActewAGL shopfronts across the ACT also celebrated World Environment Day with giveaways and information for residents.

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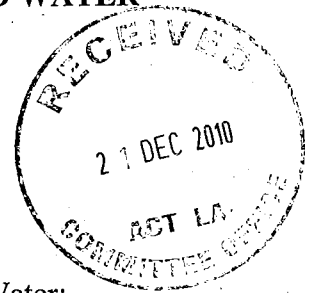
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SUPPLEMENTARY QUESTION ON NOTICE

Home energy efficiency data



The Committee - Asked the Minister for the Environment, Climate Change and Water:

- a) Does the Department have access to any data on the energy efficiency status of houses in the ACT?
- b) If so, what form does that data take and can it be made available?
- c) Does any other Department have access to this data?
- d) If no ACT Departments have access to this data, on what basis does the Government measure the potential to increase home energy efficiency?
- e) If no data exists for the energy efficiency of houses in the ACT, is the Government planning any kind of auditing prior to launching its energy efficiency strategies?
- f) What reasons are there for not undertaking to develop this data (if the Government does not expect to develop the data)?

Mr Corbell - The answer to the Member's question is as follows:

- a) DECCEW has access to the ABS household energy use and conservation data which is collected every three years. The latest publication: *4602.0.55.001 - Environmental Issues: Energy Use and Conservation, Mar 2008*, presents information on environmental behaviour and practices in Australian households for March 2008, for people aged 18 years and over.

Research for DECCEW by consultants, Heuris Partners Pty Ltd, draws together data from other sources: *ACT Greenhouse Gas Emissions: Existing policy baseline projections to 2050 Research Report February 2010* available on DECCEW's website. The report refers to the data collected in the *Energy Use in the Australian Residential sector 1986-2020, Department of Climate Change (DCC), 2008* which is also available on the Department of Climate Change website.

Also, see response to c) below.

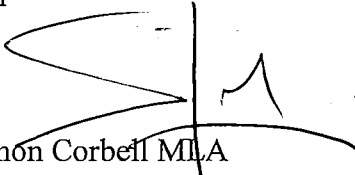
- b) The statistics in the ABS *Environmental Issues: Energy Use and Conservation* publication are available and were compiled from the Energy Use and Conservation survey, which provides information on household practices in relation to domestic energy use. It covers a range of issues including energy sources, appliances and energy saving measures used in households.

The *Energy Use in the Australian Residential sector 1986-2020, Department of Climate Change (DCC), 2008* report provides total energy consumption data by state by year, as well as by electrical appliances, water heating, cooking, space heating and space cooling.

The Institute for Sustainable Futures will collect household water and electricity consumption data. Availability of the data is subject to the Privacy Act and confidentiality agreement.

- c) The ACT Government, through the ACT Planning and Land Authority (ACTPLA) is responsible for the energy efficiency rating system for houses in the ACT. ACTPLA also pursues cost-effective improvements to building performance standards through the Building Code of Australia.
- d) Not applicable
- e) DECCEW continues to pursue improvements in data collection and evaluation through its programs.
- f) Not applicable

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Minister for the Environment, Climate Change and Water

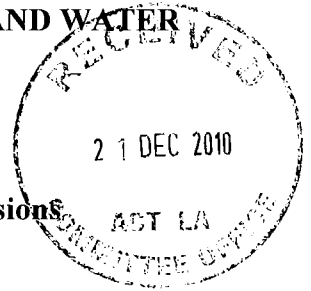
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SUPPLEMENTARY QUESTION ON NOTICE

40 per cent reduction target in greenhouse gas (GHG) emissions



The Committee - Asked the Minister for the Environment, Climate Change and Water:

- a) How many tonnes of GHG emissions did the ACT emit in 1990?
- b) How many tonnes of GHG emissions will the ACT be emitting in 2020 for it to reach the 40 per cent reduction target?
- c) Could the Minister outline for the Committee the strategy that the Government will employ to reduce the ACT's emission to 40 per cent below 1990 levels?
- d) What is the estimated cost for each?
- e) How much does the Government spend on monitoring emissions each year? How many staff are involved?

Mr Corbell - The answer to the Member's question is as follows:

- a) 3,244,000 tonnes of CO₂-e emissions, based on the ACT Greenhouse Gas Inventory 2007/08.
- b) 1,946,400 tonnes of CO₂-e emissions.
- c) *Weathering the Change* Action Plan 2 will outline strategies for halting growth in the ACT's greenhouse gas emissions and place the ACT on a pathway towards reaching the target of 40 per cent below 1990 levels by 2020.
- d) The development of Action Plan 2 will involve consideration of costs associated with emissions reduction strategies.
- e) Emissions in the ACT are monitored through the ACT Greenhouse Gas Inventory. The analysis and formulation of this has been contracted out to energy consultants Pitt&Sherry for the last three years. Development of three ACT Greenhouse Gas Inventories 2005-06, 2006-07 and 2007-08 cost approximately \$100,000.

Approved for circulation to the Standing Committee and incorporation in Hansard.

A handwritten signature of Simon Corbell, consisting of a large 'S' and a stylized 'C'.

Simon Corbell MLA

Minister for the Environment, Climate Change and Water

Date: 20.12.10



**MINISTER FOR THE ENVIRONMENT, CLIMATE CHANGE AND WATER
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**STANDING COMMITTEE ON CLIMATE CHANGE, ENERGY AND WATER
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SUPPLEMENTARY QUESTION ON NOTICE

Energy use in the ACT

The Committee - Asked the Minister for the Environment, Climate Change and Water:

- a) What is the energy usage per year per household in the ACT, and what is the average electricity Bill per household?
- b) How much of that is from Greenpower?
- c) What is the average cost per kilowatt of that Greenpower?
- d) 63 per cent of the ACT's emissions are from energy production, of this amount, how much is from coal-fired power stations, and how much is from gas-fired power stations?
- e) What is the cost differential between coal power, gas power, solar power and wind power in terms of cents per kilowatt hour?

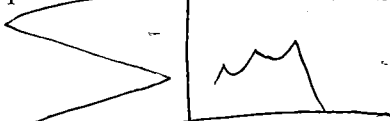
Mr Corbell - The answer to the Committee's question is as follows:

- a) Average household consumption of electricity in the ACT is estimated by the Independent Competition and Regulation Commission (ICRC) at 8,420 kilowatt hours per year, and the annual household electricity bill is approximately \$1,500.
- b) As at 30 June 2010, approximately 0.68 per cent, or 57 kilowatt hours, of the average annual electricity consumption by households in the ACT was from GreenPower. For the average household using GreenPower, 5.5 per cent, or 464 kilowatt hours of their annual electricity consumption is generated by GreenPower sources. ActewAGL reports that, for the year ending 30 June 2010, 9 per cent of the total electricity it provided to the ACT was from renewable sources.
- c) Over and above the standard price for electricity, 7.5 cents per kilowatt hour is incurred by households for the electricity they receive from GreenPower sources. Based on the average annual household consumption of electricity in the ACT and the average consumption of GreenPower by a household subscribing to it, this represents an additional cost for a household using GreenPower of just over 1 cent per kilowatt hour.
- d) A specific breakdown of the electricity generated from coal-fired and gas-fired power stations for consumption in the ACT is not available. New South Wales and ACT electricity consumption is aggregated in national reporting. Data from the Australian Bureau of Statistics on the total electricity generated by New South Wales thermal plants as at 30 June 2009 shows 89 per cent is generated from black coal, and approximately 4 per cent from natural gas.

- e) There are a number of factors such as scale and technical characteristics that determine a plant's cost of generating electricity, and therefore costs for a specific technology may vary. Recent estimates of the current cost of generation for different plant technologies show a black coal-fired plant provides the lowest cost at approximately 4.5 cents per kilowatt hour followed by base-load gas at 6 cents, wind at 12 cents and solar thermal at 30 cents.

These above answers are based on the assumption that the subject of the Committee's question is the product named GreenPower and not renewable energy in general.

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Simon Corbell MLA

Minister for the Environment, Climate Change and Water

Date: 23.12.13



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MINISTER FOR ENERGY**

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SUPPLEMENTARY QUESTION ON NOTICE

ACT Solar Power Facility

The Committee - Asked the Minister for the Environment, Climate Change and Water:

- a) How much had been spent by the Department on the expression of interest process?
- b) What consultants had been engaged?

Mr Corbell - The answer to the Member's question is as follows:

- a) The Department expended \$384,306 on the expression of interest process.
- b) The consultants engaged were IT Power Australia, PricewaterhouseCoopers and a private consultant.

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Simon Corbell MLA

Minister for the Environment, Climate Change and Water

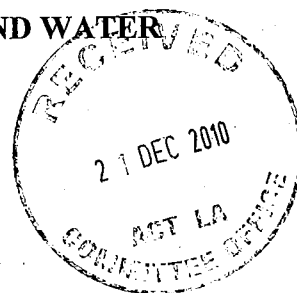
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SUPPLEMENTARY QUESTION ON NOTICE

Solar Feed-in Tariff



The Committee - Asked the Minister for the Environment, Climate Change and Water:

- a) How many, and what size systems have been installed by home owners under the Feed in tariff scheme?
- b) How many homes are now connected to the Feed-in tariff scheme? Please provide information broken down by individual suburb – how many homes are connected in each suburb?
- c) How many Kilowatt hours per year would have to be generated by the scheme for the 6 per cent target to be met? How will this be split between large scale, medium scale and micro generation?
- d) What is the total demand for electricity in the ACT each year in terms of kilowatt hours?
- e) Under the scheme, for each part of the programme – large scale, medium scale and micro – how much per kilowatt hour of electricity produced will each generator receive according to current estimates?
- f) How much will all producers in the scheme receive each year based on current estimates? Surely the Department has calculated this if the Government has agreed to this policy
- g) How many jobs have been created in the ACT from the scheme to date?
- h) Why did the NSW solar feed-in scheme fail?
- i) In her press release relating to the rehashed NSW scheme of 27 October 2010, the Premier of NSW noted that since 2009 there has been a flood of cheaper panels from China and Spain. Has this been the experience in the ACT?
- j) The Government recently announced that it would change the solar feed in tariff to accommodate large scale production. What cost in terms of cents per kilowatt hours does the Government expect that large scale producers of solar power will ask for?
- k) Where does the Government expect medium scale production to take place?
- l) How will the Government ensure that base-load power is still available during the colder winter months when solar power will not be as effective, especially during the peak times after 5.30 when people are arriving home from work and demand for energy is the highest?

Mr Corbell - The answer to the Member's question is as follows:

- a) Under the legislated reporting requirements it is not possible to separate the number and size of systems installed by home owners as distinct from landlords, commercial premises or home based businesses. At 30 September 2010 there were 3,051 solar PV installations connected to the network in the ACT. The total installed capacity at 30 September 2010 was 5.9 megawatts. Therefore the average system size is 1.9kW.
- b) As per answer a) above, data exists for the total number of installations in each suburb. At 30 September 2010 there were 3051 generators connected. See Attachment A for a list of installations by suburb.
- c) According to the ICRC report *Licensed Electricity, Gas and Water and Sewerage Utilities Compliance and Performance Report for 2007–08*, in 2007-08 the total Territory demand for electricity was 2,831 GWh. Six percent of this is 170 million kWh.

Conservatively, (assuming no further technical advances in generating efficiency are realised), once the Feed-in Tariff Scheme is fully subscribed it will be generating at about 525 million kWh per annum. The greater bulk of this generation (about 460 million kWh) will be produced by the Large Generator category (210 megawatts installed).

- d) According to the ICRC report *Licensed Electricity, Gas and Water and Sewerage Utilities Compliance and Performance Report for 2007–08*, in 2007-08 the total demand for electricity was 2,831 GWh. This is equal to 2,831,000,000 kilowatt hours
- e) It is not possible to provide an answer to this question at this time.

Under the Micro scheme, there will be a 15MW cap on all generators, however the tariff will change over time as systems become less expensive to install. Currently it is 45.7 cents per kWh.

Under the Medium scheme, there will be a 15MW cap on all generators, however legislation establishing this category has not yet been passed. Accordingly the tariff has not yet been set.

The price of electricity from a large scale facility is to be determined by an auction. Speculation about price may adversely affect the outcome of the auction.

- f) The Government has calculated that 240MW of installed capacity would cost the average household a maximum of \$225 pa once that capacity was at full production. This cost (un-indexed) will accrue over 10 years.
- g) A recent industry survey undertaken by the Department of the Environment, Climate Change, Energy and Water has identified that there about 150 people employed on a full time basis in the ACT solar PV installation industry with a further 120 sub-contractors providing auxiliary staff.
- h) It is not appropriate for the ACT Government to speculate upon the political decision making processes of another jurisdiction.

Information on the NSW Solar Bonus Scheme can be obtained from the NSW Department of Industry and Investment's website:

<http://www.industry.nsw.gov.au/energy/sustainable/renewable/solar/solar-scheme>

- i) The ACT Government does not capture data on the country of origin of installed panels. However, all panels installed in the ACT must meet Australian standards. The Premium Price payable to renewable generators was reduced from 50.05 cents per kWh to 45.7 on 30 June 2009 to reflect the overall reduction of prices in the competitive PV market.
- j) The Government will hold an auction to discover what price a producer will require for a viable project. Speculation about the price may adversely affect the outcome of the auction.
- k) Medium scale generators, between 30kW and 200kW may be installed anywhere in the ACT where there is sufficient space and they meet planning approval.
- l) The ACT continues to be connected to the National Electricity Grid and can draw power from it as required. The energy from large scale solar facilities will reduce the green house gas emissions attributed to the ACT and contribute to the ACT's GHG reduction targets. This objective can be met through solar without storage. Base-load power can be sourced through a combination of other renewable and fossil fuel sources such as waste to energy, wind and conventional fossil-fuelled power stations. The installation of solar energy generators does not put base-load electricity supply at risk.

Approved for circulation to the Standing Committee and incorporation in Hansard.

Simon Corbell MLA

Minister for the Environment, Climate Change and Water

20.12.10
Date:.....

Attachment A

Suburb	Total number of solar PV installations Sep 2010 qtr
Acton	1
Ainslie	64
Amaroo	35
Aranda	44
Banks	32
Barton	2
Belconnen (suburb)	7
Belconnen (district)	2
Bonner	2
Bonython	32
Booth district	0
Braddon	10
Bruce	28
Calwell	60
Campbell	44
Canberra District	0
Capital Hill	0
Casey	2
Chapman	31
Charnwood	15
Chifley	32
Chisholm	43
City	1
Conder	33
Cook	47
Coree District	5
Cotter River district	0
Crace	1
Curtin	82
Deakin	28
Dickson	23
Downer	36
Duffy	41
Dunlop	57
Evatt	46
Fadden	26
Farrer	32
Fisher	51
Florey	44
Flynn	35
Forde	3
Forrest	5
Franklin	20
Fraser	17
Fyshwick	2
Garran	36
Gilmore	22
Giralang	50
Gordon	49

Suburb	Total number of solar PV installations Sep 2010 qtr
Gowrie	15
Greenway	3
Griffith	25
Gungahlin	25
Gungahlin District	0
Hackett	39
Hall	4
Harrison	15
Hawker	36
Higgins	36
Holder	27
Holt	34
Hughes	24
Hume	1
Isaacs	16
Isabella Plains	41
Jerrabomberra District	0
Kaleen	67
Kambah	165
Kingston	5
Kowen district	0
Latham	31
Lawson	0
Lyneham	36
Lyons	20
Macarthur	10
Macgregor	29
Macquarie	41
Majura District	0
Mawson	19
McKellar	34
Melba	36
Mitchell	0
Monash	111
Narrabundah	34
Ngunnawal	56
Nicholls	47
NSW north	0
Oaks Estate (ACT)	4
O'Connor	78
O'Malley	6
Oxley	16
Paddy's River District	2
Page	23
Palmerston	31
Parkes	0
Pearce	18
Phillip	16
Pialligo	0
Red Hill	20

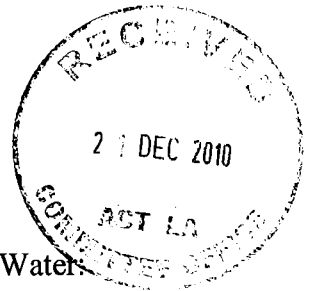
Suburb	Total number of solar PV installations Sep 2010 qtr
Reid	8
Rendezvous Creek District	0
Richardson	25
Rivett	36
Russell	0
Scullin	32
Spence	20
Stirling	29
Stromlo district	0
Symonston	0
Tennent district	0
Tharwa	1
Theodore	23
Torrens	24
Tuggeranong district	1
Turner	12
Wanniassa	75
Waramanga	26
Watson	49
Weetangera	31
Weston	43
Weston Creek district	0
Yarralumla	39

**MINISTER FOR THE ENVIRONMENT, CLIMATE CHANGE AND WATER
MINISTER FOR ENERGY**

**STANDING COMMITTEE ON CLIMATE CHANGE, ENERGY AND WATER
INQUIRY INTO THE 2009-10 ANNUAL REPORT**

SUPPLEMENTARY QUESTION ON NOTICE

Appropriations



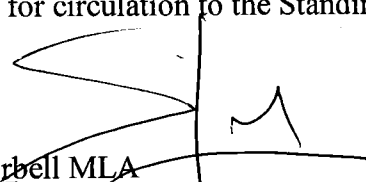
The Committee - Asked the Minister for the Environment, Climate Change and Water:

The Department was appropriated \$23 million in 2009-10 and it only drew down \$20.5 million. Why has the Department not drawn down the full amount of its appropriation?

Mr Corbell - The answer to the Member's question is as follows:

The Department has requested section 16B rollovers under the *Financial Management Act 1996* totalling \$2.948 million which represents the undrawn appropriation from 2009-10. The rollovers relate to programs that have been committed under contract in the 2009-10 and will be delivered in 2010-11.

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Simon Corbell MLA

Minister for the Environment, Climate Change and Water

20.12.10
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SUPPLEMENTARY QUESTION ON NOTICE

Action Plan 2



The Committee – Asked the Minister for the Environment, Climate Change and Water:

What measures is the department putting in place to ensure that *Weathering the Change* Action Plan 2 will be released for public consultation in the first quarter next year and will be finalised by the middle of next year?

Mr Corbell – The answer to the Member's question is as follows:

The Department of the Environment, Climate Change, Energy and Water (DECCEW) has undertaken significant work to inform the recently enacted greenhouse gas reduction legislation along with significant research, through a number of consultancies, into a greenhouse gas profile for the ACT.

This work, along with additional consultancies, will inform the development of Action Plan 2. The assessment and analysis of options regarding mitigation measures is also underway.

Further, the development of Action Plan 2 is a key priority as it will identify how the Government's greenhouse gas reduction targets will be achieved. The Department is already liaising across government and will recruit additional staff to ensure delivery.

The *Climate Change and Greenhouse Gas Reduction Act 2010*, enacted in November 2010, establishes a Climate Change Council which will be consulted during the development of Action Plan 2. The establishment of the Council is also a matter of priority for the Department.

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Simon Corbell MLA

Minister for the Environment, Climate Change and Water

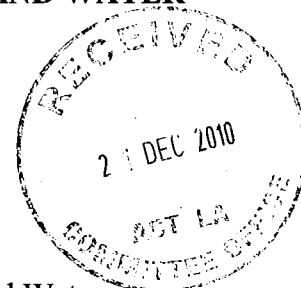
Date: 20.12.10

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SUPPLEMENTARY QUESTION ON NOTICE

Weathering the Change, Action Plan 1



The Committee - Asked the Minister for the Environment, Climate Change and Water:

- a) What is the reporting process on the status of all actions and initiatives listed as ongoing in the *ACT Climate Change Strategy: Weathering the Change* Action Plan 1 Review?
- b) When will the next progress report be publically available?
- c) For the actions and initiatives which have “Not Applicable” listed in the Effectiveness and Efficiency columns (in the Action Plan 1 Review), will you be developing means to start measuring these indicators and reporting on the outcomes in Action Plan 2?

Mr Corbell - The answer to the Member’s question is as follows:

- a) Actions that have been listed as ongoing will continue to be implemented. These will be considered for inclusion in Action Plan 2.
- b) There will not be a further progress report on Action Plan 1.
- c) Actions under Action Plan 2 will be developed with key performance indicators and an estimate of resulting greenhouse gas emissions reductions to the extent practicable.

Approved for circulation to the Standing Committee and incorporation in Hansard.

A handwritten signature in black ink, appearing to be 'S. Corbell'.

Simon Corbell MLA

Minister for the Environment, Climate Change and Water

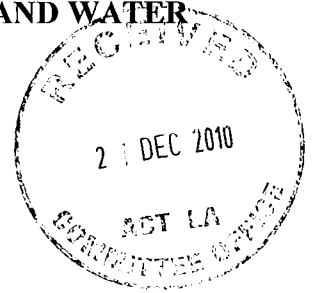
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SUPPLEMENTARY QUESTION ON NOTICE

Budget Allocation



The Committee - Asked the Minister for the Environment, Climate Change and Water:

The 2008-09 budget noted the allocation of \$242 million over years 2007-08 till 2012-13 to address climate change – how much of this allocation has been spent and what has been achieved in terms of greenhouse gas abatement?

Mr Corbell - The answer to the Member's question is as follows:

The \$242 million relates to all expenditure identified by ACTPS agencies as either delivering or supporting the outcomes and principles of the *Weathering the Change* Action Plan 1 (including capital expenditures).

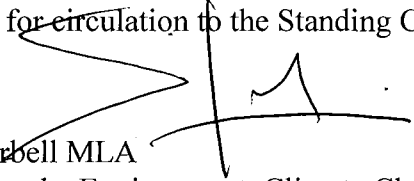
My Department is not directly responsible for this funding. Of the total funding, DECCEW has been appropriated \$35.9m over 6 years to undertake:

- climate change policy and strategy development (including staffing)
- emissions monitoring and reporting
- delivery of the AUSSI program (school based sustainability)
- development and administration of the Feed-in tariff and Solar facility
- one-off funding of the Community Energy Grant and Renewable Energy Showcase programs
- delivery of the *Switch your Thinking* (now ACTSmart) suite of water and energy efficiency rebate and education programs (including the Community Outreach for Low Income households)

This mix of direct assistance to the community, education programs and renewable energy generation is reflected in the overall Territory emissions as recorded by the ACT Greenhouse Gas Inventory.

The latest available Inventory (2008) indicates a net decline in emissions on the 2006/07 Inventory of 107 tonnes. It should be noted that the significant emission reduction impact of renewable generation projects and many of the current ACTSmart program impacts (introduced since 2008) are yet to reflect in an Inventory.

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Simon Corbell MLA
Minister for the Environment, Climate Change and Water

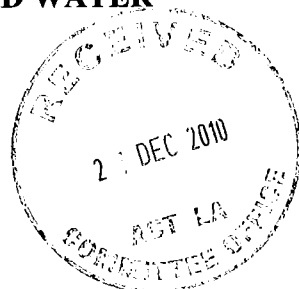
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SUPPLEMENTARY QUESTION ON NOTICE

Carbon neutrality of Government operations



The Committee – Asked the Minister for the Environment, Climate Change and Water:

- a) When will the framework for ACT Government Carbon Neutrality be released? Will it be subject to public consultation?
- b) Will the framework only cover GHG emissions or the carbon footprint or will it also include sustainability across Government operations – i.e. water use, waste generation, impacts on biodiversity?

Mr Corbell - The answer to the Member's question is as follows:

- a) The framework for ACT Government Carbon Neutrality will be released in 2011. It will be subject to consultation with ACT Government agencies and departments and relevant stakeholders as necessary.
- b) The primary focus of the ACT Government Carbon Neutral Framework is greenhouse gas emissions.

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Simon Corbell MLA

Minister for the Environment, Climate Change and Water

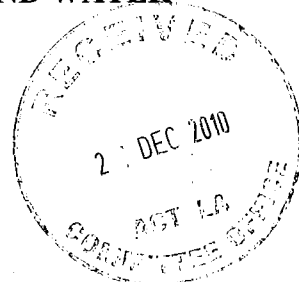
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SUPPLEMENTARY QUESTION ON NOTICE

Carbon Neutrality of Government Operations



The Committee - Asked the Minister for the Environment, Climate Change and Water:

- a) The Minister indicated that there would be some form of Whole-of-Government reporting and review of ACT Government operations - can more information be provided on what this might entail?
- b) All agencies have included their ESD data in the most recent annual report. Has any collation of this data been undertaken?
- c) Are emissions from ACT Government operations increasing or decreasing?
- d) What were the emissions from ACT Government operation for 2009-10 and for 2008-09?

Mr Corbell - The answer to the Member's question is as follows:

- a) The process to consolidate individual agency records on a whole-of-government basis will be considered in the development of the ACT Government Carbon Neutral Framework.
- b) DECCEW is currently liaising with other government agencies regarding collation of ESD data from 2009-10.
- c) Refer to (d).
- d) Aggregated information on emissions from ACT Government operations for 2009-10 and 2008-09 is not yet available.

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Simon Corbell MLA

Minister for the Environment, Climate Change and Water

Date: 20.12.10

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SUPPLEMENTARY QUESTION ON NOTICE

Carbon budgets



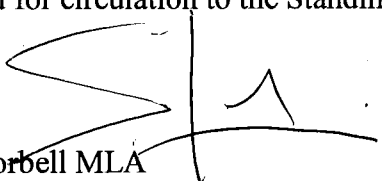
The Committee – Asked the Minister for the Environment, Climate Change and Water:

Will the carbon budgets proposed apply simply to the “carbon footprint” of the operations of Government agencies or will they also apply to services and programs managed by the agency?

Mr Corbell - The answer to the Member’s question is as follows:

The ACT Government Carbon Neutral Framework, currently under development, is considering a range of measures and actions to achieve carbon neutrality for Government, including carbon budgeting.

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Simon Corbell MLA

Minister for the Environment, Climate Change and Water

Date: 20.12.10

**MINISTER FOR THE ENVIRONMENT, CLIMATE CHANGE AND WATER
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SUPPLEMENTARY QUESTION ON NOTICE

Role of the Commissioner for Sustainability and the Environment



The Committee - Asked the Minister for the Environment, Climate Change and Water:

Given it may be some time before the Government considers the three reports prepared by the Office of the Commissioner for Sustainability and Environment on its expanded role can these reports be publicly released now?

Mr Corbell - The answer to the Member's question is as follows:

The Government is currently considering the report from the Commissioner for Sustainability and the Environment regarding an expanded role. It is expected that a Government Response to the Commissioner's report will be provided early in 2011. It would be appropriate for the Commissioner's reports to be made available at that time.

Approved for circulation to the Standing Committee and incorporation in Hansard.

Simon Corbell-MLA

Minister for the Environment, Climate Change and Water

201210
Date:.....

**MINISTER FOR THE ENVIRONMENT, CLIMATE CHANGE AND WATER
MINISTER FOR ENERGY**

**STANDING COMMITTEE ON CLIMATE CHANGE, ENERGY AND WATER
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SUPPLEMENTARY QUESTION ON NOTICE

Legislation before the Assembly



The Committee - Asked the Minister for the Environment, Climate Change and Water:

Can the Minister please provide to the Assembly a timetable of when major environment legislation is likely to come before the Assembly over the next two years?

Mr Corbell - The answer to the Member's question is as follows:

The Government's annual Autumn and Spring Legislation programs are tabled in the Legislative Assembly during the first week of the Autumn and Spring sitting periods.

Approved for circulation to the Standing Committee and incorporation in Hansard.

Simon Corbell MLA

Minister for the Environment, Climate Change and Water

Date: 20.12.10