

# Open Access Information release outcome decision:

## Partial access granted

**Document Category:** Ministerial briefs

**Title of documents:**

- Minister for Climate Change and Sustainability Question Time Briefs February 2018
- Minister for Climate Change and Sustainability Question Time Briefs March 2018

**Description of the information:**

The documents are question time briefs prepared for the Minister for Climate Change and Sustainability for the February and March 2018 sittings of the Legislative Assembly, which relate to the functions of the Environment, Protection and Sustainable Development Directorate. A list of the briefs is at [Attachment A](#).

These Question Time Briefs contains some information the release of which would be contrary to the public interest. This information has been deleted from this publicly available copy of the documents for the reasons outlined below.

**Decision**

I am an Information Officer appointed under section 18 of the *Freedom of Information Act 2016* (the FOI Act).

I have decided to grant full access to 28 documents and partial access to 3 documents. This decision is made under sections 24(2)(b) and (c) of the FOI Act on the basis that the information refused is contrary to the public interest to disclose.

**Reasons for decision**

The FOI Act recognises the right of every person to obtain access, under its provisions, to government information (see section 7, the FOI Act). As an Information Officer, I am required to allow access to information subject to the FOI Act, unless, on balance, disclosure would be contrary to the public interest.

In reaching my access decision, I have taken the FOI Act into account:

- Sections 24(2)(b), which allows for the information to be withheld when it is taken to be contrary to the public under schedule 1 of the FOI Act.
- Section 24(2)(c), which allow for the information to be withheld on the basis that the disclosure would, on balance, be contrary to the public interest under the test set out in section 17 of the FOI Act.

Information Disclosure – Contrary to the Public Interest under Schedule 1 of the FOI Act

Schedule 1 of the FOI Act recognises a range of information that is taken to be contrary to the public interest to disclose unless the information identifies:

- corruption or the commission of an offence by a public official; or
- that the scope of a law enforcement investigation has exceeded the limits imposed by law.

Schedule 1, section 1.6 'Cabinet information' applies to information the disclosure of which would reveal any deliberation of Cabinet. Documents 3 and 19 contain information about Cabinet deliberations and disclosure of the information is contrary to the public interest. Moreover, I am satisfied that the information is not 'purely factual information', and its disclosure would not reveal corruption or the commission of an offence by a public official or that the scope of a law enforcement investigation has exceeded the limits imposed by law.

## Information Disclosure – Schedule 2 of the FOI Act

In assessing whether disclosure of the remaining information identified in the briefs would, on balance be contrary to the public interest, I must apply the test outlined under section 17 of the FOI Act.

This requires consideration of factors favouring disclosure, any favouring nondisclosure and the balancing of those factors when considered cumulatively. Unless, on balance, disclosure would be contrary to the public interest, access to the information must be allowed. These factors are found in subsection 7(2) and schedule 2 of the Act. In applying the public interest test to the briefs, I have determined that disclosure of the information could reasonably be expected to do the following:

- Schedule 2, item 2.1(a)(i) – promote open discussion of public affairs and enhance the government’s accountability; and
- Schedule 2, item 2.1(a)(ii) – contribute to positive and informed debate on important issues or matter of public interest.

I consider that release of the briefs may contribute to open discussion of public affairs and enhance the government’s accountability and contribute to informed debate on matters of public interest. I consider there is a public interest in the subject of these briefs, and I am satisfied that disclosure would increase transparency and accountability of the government. Noting the pro disclosure intent of the FOI Act, I have given substantial weight to the factors favouring disclosure.

I have however, also determined that there is one factor favouring nondisclosure:

- Schedule 2, item 2.2(a)(xi) - disclosure of the information could reasonably be expected to prejudice trade secrets, business affairs or research of an agency or person.

Document 17 contains business information about third parties that if released could reasonably be expected to prejudice trade secrets, business affairs or research of service providers engaged by the Directorate. On balance, I am satisfied that redacting only the business information that I believe is not in the public interest to release will ensure that the intent of the FOI Act is met and will provide access to the majority of the information within the briefs.

## **Review rights**

### Ombudsman review

The decision to withhold information is a reviewable decision as identified in schedule 3 of the FOI Act. You have the right to seek Ombudsman review of this decision. Under section 74 of the FOI Act, an application for Ombudsman review must be made within 20 working days from the day this decision was published on the agency’s website, or a longer period allowed by the Ombudsman.

If you wish to request a review of my decision you may write to the ACT Ombudsman at:

The ACT Ombudsman  
Attention: ACT FOI  
GPO Box 442  
CANBERRA ACT 2601  
Via email: [actfoi@ombudsman.gov.au](mailto:actfoi@ombudsman.gov.au)

ACT Civil and Administrative Tribunal (ACAT) review

Under section 84 of the FOI Act, if a decision is made under section 82(1) on an Ombudsman review, you may apply to the ACAT for review of the Ombudsman decision. Further information may be obtained from the ACAT at:

ACT Civil and Administrative Tribunal  
GPO Box 370  
CANBERRA ACT 2601  
Telephone: (02) 6207 1740  
<https://www.acat.act.gov.au/>

A handwritten signature in blue ink, appearing to read 'Fiona Wright'.

Fiona Wright  
Information Officer  
Executive Group Manager, Climate Change and Energy Division  
14 June 2023

## FREEDOM OF INFORMATION OPEN ACCESS INFORMATION SCHEDULE

This information is released under section 23(a)(i) of the *Freedom of Information Act 2016* which requires the release of specified documents over five years old. Due to the age of the information being released it may not reflect current legislation or Government policy and phone numbers and webpages mentioned may not still be current.

Ref No	Page Numbers	No of pages	Description	Date	Status	Reason for non-release or deferral	Open Access release status
<b>Minister for Climate Change and Sustainability (February 2018)</b>							
1.	1	1	Question Time Brief index list	February 2018	Full release	-	Yes
2.	2-3	2	Providing choice in gas network provision (includes Ginninderry)	February 2018	Full release	-	Yes
3.	4	1	ACT's Climate Strategy Discussion Paper	February 2018	Partial release	Schedule 1, 1.6	Yes, with redactions applied
4.	5-6	2	Energy Security – Preparing for Summer	February 2018	Full release	-	Yes
5.	7-9	3	Energy policy developments	February 2018	Full release	-	Yes
6.	10-11	2	What is Power of Choice	February 2018	Full release	-	Yes
7.	12-13	2	ACT Climate Change policy – costs to community and consumers	February 2018	Full release	-	Yes
8.	14-15	2	Electricity and gas prices	February 2018	Full release	-	Yes
9.	16-17	2	The release of the OCSE ISR Report	February 2018	Full release	-	Yes
10.	18	1	Solar for Low Income Program	February 2018	Full release	-	Yes
11.	19-21	3	Community Zero Emissions Grants Program	February 2018	Full release	-	Yes
12.	22-23	2	EEIS Programs and Services supporting the ACT community	February 2018	Full release	-	Yes
13.	24-36	13	ACTSmart - Sustainability Programs	February 2018	Full release	-	Yes
14.	37-39	3	Renewable energy programs	February 2018	Full release	-	Yes
15.	40-41	2	Carbon Neutral Government	February 2018	Full release	-	Yes

Ref No	Page Numbers	No of pages	Description	Date	Status	Reason for non-release or deferral	Open Access release status
<b>Minister for Climate Change and Sustainability (March 2018)</b>							
16.	1	1	Question Time Brief index list	February 2018	Full release	-	
17.	2	1	Hydrogen demonstration (including vehicles)	March 2018	Partial release	Schedule 2, 2.2(a)(xi)	Yes, with redactions applied
18.	3-4	2	Providing choice in gas network provision (includes Ginninderry)	March 2018	Full release	-	Yes
19.	5-6	2	ACT's Climate Strategy Discussion Paper	March 2018	Partial release	Schedule 1, 1.6	Yes, with redactions applied
20.	7-10	4	National Energy policy developments	March 2018	Full release	-	Yes
21.	11-13	3	What is Power of Choice	March 2018	Full release	-	Yes
22.	14-16	3	ACT Climate Change policy – costs to community and consumers	March 2018	Full release	-	Yes
23.	17-20	4	Electricity and gas prices	March 2018	Full release	-	Yes
24.	21	1	CSIRO Canberra Urban Heat report and Living Infrastructure Information Paper	March 2018	Full release	-	Yes
25.	22-24	3	Net zero emissions economic modelling	March 2018	Full release	-	Yes
26.	25-26	2	Solar for Low Income Program	March 2018	Full release	-	Yes
27.	27-29	3	Community Zero Emissions Grants Program	March 2018	Full release	-	Yes
28.	30-32	3	EEIS Programs and Services supporting the ACT community	March 2018	Full release	-	Yes
29.	33-46	14	ACTSmart - Sustainability Programs	March 2018	Full release	-	Yes
30.	47-50	4	Renewable energy programs	March 2018	Full release	-	Yes
31.	51-53	3	Carbon Neutral Government	March 2018	Full release	-	Yes
<b>Total No of Documents: 31</b>							



# Minister for Climate Change and Sustainability

## Question Time Brief Index

February 2018

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D.	Energy policy developments
E.	What is Power of Choice

<b>CLIMATE CHANGE AND SUSTAINABILITY</b>	
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9.	Carbon Neutral Government Framework - Savings opportunities from accelerating energy efficiency in government operations

# ENVIRONMENT, PLANNING AND SUSTAINABLE DEVELOPMENT

## ASSEMBLY BRIEF

### ISSUE: Providing choice to developers in the provision of gas network infrastructure

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#### Context

The matter of gas connection to new suburbs has recently come to public attention following the proposal by the Riverview Group to not include gas reticulation as part of the new Ginninderry estate development at West Belconnen.

#### Talking Points

- The Territory Plan requires natural gas distribution infrastructure to be installed in all new estate developments, along with other services like water and electricity.
- The ACT Government has considered a request from the developers of the Ginninderry estate in West Belconnen to remove the mandatory requirement to install natural gas in support of its plans for a low-carbon electricity 'microgrid' for the development.
- Rather than pursue full deregulation, the ACT Government has agreed to support a pilot demonstration project of an all-electric area in Stage 1 of the Ginninderry precinct. The pilot project will include the first 350 residences where gas will not be connected.
- The pilot project will be jointly managed by Evoenergy, the ACT's electricity network operator, the Ginninderry Joint Venture, the ACT Government and Reposit Power. The results of the pilot will inform government consideration of future energy infrastructure and planning policies.
- Current estimates suggest that by 2020, over 15 per cent of ACT greenhouse gas emissions will come from natural gas related emissions, predominantly associated with residential and commercial space and water heating applications. Consistent with our greenhouse gas emissions reduction targets and our commitment to net zero emissions by 2050 at the latest, it is prudent that the Government examines how we might reduce all emissions sources, including from natural gas use.
- Infrastructure decisions made in coming years will shape our future emissions profile.
- While the growth in natural gas consumption in the Territory has moderated in recent years, gas is expected to play a role for some time to come, especially in the national electricity generation sector, supporting the transition to renewables.
- Observed increases in retail gas prices, and the Territory's renewable electricity target, are now challenging the long held assumption that gas is a cheaper and cleaner alternative to electricity for particular residential uses.
- Innovations in household cooking (induction stoves), space heating and hot water appliances (heat pumps) now provide households with more choice of how to meet their heating and cooking needs. Winding back government mandates and promoting greater consumer choice will promote technology and commercial innovation and lower costs for all energy users.

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#### Background

##### Requirements for gas in new estates

- The provision of natural gas reticulation infrastructure to new estate developments is established via a mandatory rule in the Estate Development Code. Rule 43 of the Estate Development Code requires the provision of gas distribution infrastructure, as well as other essential services such as electricity and water, in new estate developments.
- The Estate Development Code is part of the Territory Plan, a statutory document legislated through the *Planning and Development Act 2007*. Any decision to not require the mandatory roll out of gas distribution infrastructure to new estate developments would require a variation to the Territory Plan.

#### Infrastructure costs

- ACT energy consumers, through regulatory determinations, bear the cost of energy infrastructure investment through their energy bills. It is therefore important that policy makers have sufficient information and evidence to enable appropriate scrutiny of future investment decisions for energy infrastructure.
  - Lower demand for gas over time, for economic reasons, could create a scenario where energy consumers were required to carry the cost of maintaining underutilised infrastructure, rather than the risk being borne by the gas network business that made the investment. This is a matter that could also be considered by the COAG Energy Council which oversees the way in which gas network expansion and gas network pricing for consumers is approved.
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# ENVIRONMENT, PLANNING AND SUSTAINABLE DEVELOPMENT

## ASSEMBLY BRIEF

### ISSUE: ACT's Climate Strategy Discussion Paper

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#### Context

In 2017 the Climate Change policy team commenced the development of the next climate change strategy and action plan for the ACT. The first step in the process was to release a discussion paper for public consultation which was cleared by Cabinet on 6 December 2017.

#### Talking Points

- A discussion paper on the ACT's climate strategy to a net zero emissions territory is open for public comment.
- The consultation period commenced on 11 December 2017 and will remain open until 9 April 2018.
- Input for the development of the paper includes:
  - Community ideas from two roundtables held in 2017
  - Advice from ACT's Climate Change Council
  - Greenhouse gas emissions modelling of policy options and pathways.
- The discussion paper seeks community views on Council's proposal to set a new target for achieving net zero emissions by 2045 (in place of the current 2050 target) and setting interim emission reduction targets for 2025, 2030 and 2040.
- Key focus areas for reducing emissions and increasing resilience to climate change are energy, transport, waste and land use.
- To achieve the next set of emission reduction targets we will need to reduce emissions fairly rapidly, especially from how we travel around the city.
- It is also important to consider the ongoing efficiency of how we use electricity, and how we build our homes, offices and public buildings to be low carbon and climate resilient.
- The Government is seeking feedback on the proposed targets and the approach to selecting policies and actions to reduce emissions and build resilience in the Territory.
- Comments can be made through the Yoursay page.
- Schedule 1 - 1.6

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#### Background

ACT's current climate change strategy, AP2, sets a pathway to achieving our 2020 targets. The new strategy will build on this work to set a pathway to 2025 so that the ACT can continue to lead on climate action. A new strategy and action plan needs to be in place by 2019.

EPSDD commenced work on a new strategy in December 2016, meeting with the ACT's Climate Change Council to seek initial advice on emissions modelling. Two community roundtables were held in February and March 2017, and targeted stakeholder consultations were held during 2017 with subject matter experts to gather innovative ideas and topics for further investigation.

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# ENVIRONMENT, PLANNING AND SUSTAINABLE DEVELOPMENT

## ASSEMBLY BRIEF

### ISSUE: Energy Security – Preparing for summer

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#### Context

In February 2017, the ACT-NSW electricity grid experienced significant stress due to extreme heatwave conditions. While this event was managed by reducing demand and no unplanned outages occurred in the Territory as a result, the ACT Government has taken additional steps to prepare for this summer.

#### Talking Points

- Canberra households and businesses enjoy one of the most reliable electricity grids in the world. Significant power outages are rare in the ACT.
- However, as our climate is changing, we are also experiencing more frequent heatwave conditions. This is driving high levels of demand for electricity during extreme heat, putting stress on our electricity grid. The high heat also reduces output from coal generators in NSW.
- During last summer's heatwave, a supply shortfall placed the grid under severe pressure for a number of hours. So as to avoid blackouts, the ACT and NSW Governments put out a call to consumers to voluntarily reduce their electricity use during peak periods. The response from customers and businesses resulted in around 200 megawatts of demand being reduced, saving many thousands of households from losing power altogether.
- Calls for 'voluntary restrictions' are not regularly exercised, and this was the first time either the ACT or NSW Governments have had to put their plans into action.
- It is possible the grid may face stress again this summer. The ACT Government, along with industry and other governments has taken a number of actions to help avoid this outcome.

#### 2017-18 Summer preparedness actions

- The ACT, NSW and Commonwealth Governments are working together through the Energy Emergency Summer Readiness Working Group, to ensure that there is a coordinated response from all three Governments across the ACT-NSW region, during peak demand conditions.
  - Actions taken include identifying major loads across the Government sector that could be called to reduce their consumption if the grid is experiencing high levels of demand.
- The Directorate is working closely with Evoenergy to ensure all the appropriate emergency procedures are in place and to ensure that major electricity users are available to contribute to demand reductions should the need arise.
- The Government also participated in national electricity and gas emergency exercises facilitated by the Australian Energy Market Operator (AEMO). The most recent exercise tested the *ACT Energy Emergency (Coordination) Plan* to ensure it remains updated and appropriate.
- A communications strategy has been developed to support community and businesses save energy over the coming summer. Messaging is focused on easy and simple actions consumers can take to reduce electricity use and save money.
  - Communications activities have highlighted that lots of small energy saving actions taken by household and business energy consumers can help avoid black-outs during peak summer heatwave conditions.

- These messages are being communicated through a number of different mediums including social media, government websites, newsletters and other media channels.
- AEMO is working with the industry and governments to ensure the National Electricity Market is able to cope with extreme conditions this summer. Significant actions taken include completion of generation and transmission maintenance prior to the peak summer period.
- Other actions taken by AEMO include facilitating new generation and storage, greater utilisation of demand side participation, and ensuring there is sufficient gas supply to meet both domestic gas consumption and electricity generation.
- Currently, only South Australia has a large battery installation capable of supporting the electricity network during extreme weather conditions. Although the ACT does not have such facilities, a similar outcome may be achieved through the Next Generation Energy Storage program and battery systems that are being aggregated to form Virtual Power Plants (VPPs). While this industry is still developing, it will likely be able to provide support in future summers.
- The ACT Government does not currently have plans to build a large battery installation, and is instead focusing on energy storage for homes and businesses. This provides a number of advantages, including allowing the ACT to maximise the comparative advantage it has in the development of small-scale renewable energy technology, and leveraging the backing from the progressive ACT community that is willing to support the installation of battery technology.
- It is important to note that while electricity supply can never be 100 per cent guaranteed due to external factors such as the weather, Canberra generally enjoys high levels of electricity supply reliability. According to the Australian Energy Regulator, ACT customers have the lowest incidence of unplanned outages across the National Electricity Market.

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## Background

Increased incidence of extreme heat due to a changing climate is putting stress on the electricity grid. Extreme temperatures not only cause high levels of electricity demand, but also reduce electricity supply by impacting the operation of thermal electricity generators. The combined impact of these two events occurring together can reduce available electricity reserves and increase the risk of blackouts.

# ENVIRONMENT, PLANNING AND SUSTAINABLE DEVELOPMENT

## ASSEMBLY BRIEF

### ISSUE: National Energy policy developments

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#### Context

Australian energy markets are experiencing a major period of change driven by a range of government reforms and shifts in technology and consumer preferences.

On 17 October 2017, the Commonwealth Government, on advice from the newly formed Energy Security Board (ESB), announced its policy for a National Energy Guarantee (NEG) scheme.

#### Talking Points

##### The National Energy Guarantee (NEG)

- The NEG would create new obligations on electricity retailers to purchase set amounts of ‘dispatchable energy generation’ to meet a reliability obligation, and set amounts of ‘renewable or low emissions energy generation’ to meet an emissions reduction obligation.
- The NEG would be administered by the Australian Energy Regulator, although other market bodies may also have roles.
- The ESB has emphasised that this is a plan in its infancy and requires substantial modelling and stakeholder engagement. This would be expected to take at least 12-18 months.
- The information available to date does not mention any emissions trajectory past 2030. It also only considers electricity sector emissions reductions targets on a pro-rata basis. This would result in other sectors of the economy such as transport and land use having to account for a larger share of the remaining abatement task.
- Major questions affecting the ACT still need to be answered, such as:
  - the absence of a net zero emissions reduction trajectory to 2050 in line with the Paris Climate Agreement,
  - any impacts on competition and consumer choice in electricity markets, and
  - the implications regarding the additionality or otherwise of state and territory renewable energy and emissions reduction policies.
- It is also not clear what the basis is for the estimated per household annual savings of \$100-115. No modelling has been provided to substantiate this supposed saving.
- The NEG policy proposal was put forward to the COAG Energy Council in late November 2017. Despite the misgivings of the ACT and South Australian governments, the COAG Energy Council voted via majority to task the ESB to undertake further design work on the NEG. It is important to note that a decision has not yet been made to implement a NEG policy.
- COAG Energy Ministers are likely to consider this question in mid-2018 once the policy has been further developed.

- The ACT Government supports the implementation of a national energy policy that ensures energy supply is affordable, reliable and helps meet Australia's Paris Agreement climate change commitments.
- Despite being a sub-optimal policy option (after carbon pricing, an Emissions Intensity Scheme or a Clean Energy Target), if the new mechanisms can satisfy Australia's emissions reduction commitments to 2030, and to 2050, then they may be sufficiently durable to provide the necessary investment certainty the electricity sector requires.
- The ACT Government is working through the COAG Energy Council to further understand the detail of the NEG proposal and the possible implications for the Territory.

#### Changing consumer preferences

- Energy consumers are gaining greater choice and control including through adopting rooftop solar and energy storage and through non-conventional 'microgrid' approaches to electricity network development.
- The COAG Energy Council has committed to removing barriers to new technologies. Consumer groups are also being consulted on how to best balance consumer protections and the need to enable market innovation.

#### Changes in the ACT

- Over 18,000 Canberra households and businesses have now installed rooftop solar power system, totalling approximately 66 megawatts in installed capacity. Coupled with our Canberra-based large scale solar farms, over 100 megawatts of solar generating capacity is now operating in the Territory.
- In the ACT we are continuing to lead the way for new innovations in the energy sector. For example, Canberra businesses Reposit Power and Evoenergy launched a Canberra-based trial in late 2017 of the world's largest residential virtual power plant.
- This innovative project rewards participating households for exporting their stored electricity that has been generated from a rooftop solar system. The virtual power station coordinates batteries distributed across the city and can help manage peak electricity demand and improve grid security.
- It is projects such as this that have cemented Canberra as a nation leading hub for renewable energy research and development, and are at the forefront of an energy consumer transformation.

#### Changing generation mix

- Commonwealth and state-based renewable energy support schemes are resulting in traditional thermal (fossil fuel-based) generation being displaced by large-scale wind and solar generators, which have different technical characteristics.
- The 'Finkel Review' into the future security of the National Electricity Market (NEM) was released on 9 June 2017. The Review made a number of recommendations to enhance energy security and reliability of supply, and to increase certainty as the energy sector transitions to one that is less greenhouse gas intensive. This work comes at an important time as investor uncertainty in the generation sector is contributing to rising wholesale electricity prices.

- The ACT Government has welcomed the Finkel Review and is working with our counterparts in the Commonwealth and other States to develop a response which will drive the necessary decarbonisation of the electricity sector, while maintaining a reliable and affordable electricity supply.

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## Background

### National Energy Guarantee (NEG)

A summary of the prospective NEG scheme is set out in 8-page a letter from the Energy Security Board (ESB) to the Commonwealth Environment and Energy Minister Josh Frydenberg MP dated 13 October 2017. State and territory governments have not been consulted on the detail of the Commonwealth's NEG announcement.

The ESB's advice follows a letter from the Commonwealth Government to the ESB in early September 2017 seeking advice on a new policy mechanism to deliver against energy reliability, affordability and emissions reduction objectives.

The NEG would be enacted via changes to national energy laws. Any change to national energy laws require the unanimous agreement of the COAG Energy Council, comprised of Commonwealth, state and territory governments.

### ACT energy policies and programs

The ACT's Sustainable Energy Policy 2011-2020 provides an integrated framework with four targeted outcomes:

- Reliable and affordable energy
- Smarter use of energy (energy efficiency)
- Cleaner energy
- Growth in the clean economy.

In addition to ACT energy policies and programs, all jurisdictional Energy Ministers participate in the COAG Energy Council (the Council) which provides policy leadership of the National Electricity Market (NEM) under the Australian Energy Market Agreement. The NEM is operated by the Australian Energy Market Operator (AEMO), regulated by the Australian Energy Regulator (AER) and rules are made by the Australian Energy Market Commission (AEMC).

# ENVIRONMENT, PLANNING AND SUSTAINABLE DEVELOPMENT

## ASSEMBLY BRIEF

### ISSUE: What is *Power of Choice* and what will it mean to everyday Canberrans

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#### Context

'Power of Choice' reforms to the National Electricity Market (NEM) will provide consumers with more choice and control over how they manage their electricity expenditure while helping to drive down costs for all electricity users. The main reforms that started on 1 December 2017 introduced smart meters and made metering a competitive service.

#### Talking Points

- Power of Choice is a national package of reforms to the National Electricity Market (NEM). These reforms will provide consumers around Australia, including the ACT, with more choice and control over how they manage their electricity expenditure.
- One of the main reasons electricity bills have increased rapidly over the past decade is due to massive investment in the electricity network (or 'poles and wires'). The Power of Choice reforms will encourage consumers to reduce their peak demand thereby driving down the cost of grid operation into the future.
- Australia's Power of Choice reforms are an important part of building the electricity grid of the future and taking advantage of the rapid transformation that is underway in the energy sector.
- The main change that started on 1 December 2017 introduced smart meters and made the provision of smart meters a competitively offered service to consumers. Electricity retailers are now responsible for installing and reading smart meters instead of monopoly network businesses.
- A smart meter is a digital electricity meter that records how much electricity is used and when. A smart meter can be read remotely, and the process of changing from one retailer to another will be able to occur more quickly. A smart meter can provide customers with more useful information about how they use electricity. This in turn can help people identify ways to better manage their electricity bills.
- From 1 December 2017, any newly built residence or business will require a smart meter. When an existing electricity meter breaks down or otherwise needs replacing, it will be replaced with a smart meter.
- The Power of Choice changes will not directly affect Canberrans if their existing electricity meter is in working order.
- Canberrans can also choose to replace their existing meter with a smart meter at any time. Customers should talk to their preferred retailer about what options are available.
- Electricity customers already pay for new electricity meters and this will not change after 1 December 2017. The change here is that electricity retailers will determine the cost of smart meters. Some retailers have already announced they will provide free smart meters as part of their new tariff packages.
- As with choosing any other product, Canberrans should research the deals on offer and choose the best deal for their circumstances. Electricity retailers make most of their profits from their loyal customers. The Energy Made Easy website operated by the Australian Energy Regulator provides an independent price comparison service that can help customers find the best deal.

- For customers who can reduce their electricity use during peak times by spreading out the use of appliances to off-peak periods, a retail demand or time-of-use tariff may be beneficial.
- From 1 December 2017, for customers with smart meters, the default tariff that Evoenergy charges the electricity retailer will incorporate a 'demand tariff'. These tariffs better reflect the cost of generating and transporting electricity at peak times. How electricity retailers pass this cost to customers through various plans will be choice for them to make, informed by their customer's preferences.

*Who to contact:*

- In case of a power outage or other electricity supply issues, faults or emergencies, customers should call Evoenergy. For any other matters around meters or billing, customers should call their electricity retailer.

*Tenant Landlord Scenarios*

- In rental situations, if an electricity meter fails, the tenant would contact their preferred retailer to have a smart meter installed. The lessor cannot block this work, and will need to meet the cost of any extra electrical work needed to retain a physical supply. This is because the lessor has an obligation under the *Residential Tenancies Act 1997* to ensure physical supply of electricity to a property.
- If a tenant wished to upgrade a working meter to a smart meter, lessor approval would be required. This is similar to seeking approval for any other improvement to the rental property.

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## **Background**

The Power of Choice reforms apply to small electricity customers (consuming less than 100MWh per year). These are mainly households, and some small businesses and organisations. The reforms were initiated following the 2012 Australian Energy Market Commission (AEMC) Power of Choice Review, which was agreed by the Council of Australian Governments (COAG) Energy Council.

Customers who find they are required to obtain a smart meter and are unable to find a better electricity deal or move their electricity load to take advantage of demand tariffs, may see a rise in costs. A range of programs and concessions are can assist people having difficulty managing their energy use or paying their energy bills. Actsmart programs are an example of this.

The person that attends a premises and installs a smart meter must be a licensed electrician and must be endorsed to undertake smart meter work in the ACT.

Smart meters are manufactured to Australian Standards and must comply with the electromagnetic exposure limits developed by the Australian Radiation Protection and Nuclear Safety Agency (the same as all other wireless devices).

Information collected by a customer's smart meter is sent to electricity market 'participants' including the relevant electricity retailer and distributor. Electricity market participants are required to keep customer information confidential under the National Electricity Law. The Australian Energy Market Operator requires metering companies to demonstrate that they can keep their metering systems secure. The Privacy Act also applies to electricity companies.

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## ENVIRONMENT, PLANNING AND SUSTAINABLE DEVELOPMENT ASSEMBLY BRIEF

### ISSUE: ACT Climate Change policy – costs to community and consumers

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#### Context

The cost of the ACT Government Feed-in Tariff schemes and the cost of the Energy Efficiency Improvement Scheme is passed on to consumers via electricity bills.

#### Talking Points

- ACT Government climate change mitigation policies are expected to contribute around \$200 to the typical annual electricity bill of a four person household in the ACT in 2017-18. Despite these costs, the ACT continues to have among the cheapest electricity prices in Australia.
- These costs are offset by an annual saving of around \$250 on average for the over 70,000 households and businesses that have participated in the Government's Energy Efficiency Improvement Scheme.

#### Cost of the Feed-in Tariff (FiT) schemes

- The ACT's FiT schemes which support investment in clean renewable energy form the largest share of these costs.
- Together, the ACT's large and small FiT schemes are expected to contribute approximately \$168 to the annual electricity bill of a typical four person Canberra household in 2017-18.
- These FiT schemes are a key part of the ACT's 100 per cent by 2020 renewable electricity target. The ACT remains on track to achieve its 100 per cent by 2020 renewable electricity target. This is one of the most ambitious targets globally.
- The Government has been very open about the costs of moving to increased supply of renewable electricity, and remains confident that these costs will be less than originally modelled in 2012.

#### Cost of the Energy Efficiency Improvement Scheme (EEIS)

- The Energy Efficiency Improvement Scheme is expected to contribute approximately \$31 to the annual electricity bill of a typical four person Canberra household in 2017-18. This is much lower than the expected annual average saving in 2020 of around \$250 for participating households and businesses.

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#### Background

The *Climate Change and Greenhouse Gas Reduction Act 2010*, commits the Territory to reducing greenhouse gas emissions to 40 per cent below 1990 levels by 2020. To achieve these reductions, the ACT Government set a target to secure 100 per cent renewable electricity by 2020. The switch to renewable electricity is projected to account for over 90 per cent of emission reductions by 2020. The cost of these policies is passed on to consumers via electricity bills.

*Note: The annual consumption of a typical four person household in the ACT is 7.441 megawatt hours (Source: Australian Energy Regulator), which has been used to calculate the cost of these policies. This is different from the Electricity and Gas Price Increases question time brief, which uses 8 megawatt hours to help achieve consistency with the ICRC's report and media release, noting this overestimates costs.*

## Opportunities to mitigate costs

There are many ways in which the ACT Government is supporting households and businesses to manage their energy usage and costs.

- Ask for advice through the Actsmart Sustainable Home Advice line. Call 1300 141 777 or email [ActsmartAdvice@act.gov.au](mailto:ActsmartAdvice@act.gov.au).
- Get an energy assessment, including education and draught proofing through the Actsmart Home Energy Efficiency Program run through St Vincent de Paul. Contact St Vincent de Paul on 6234 7408 or [energyefficiency@sudp.org.au](mailto:energyefficiency@sudp.org.au).
- Attend a workshop on heating and cooling homes efficiently, do it yourself draught proofing and more. See [actsmart.act.gov.au/news-and-events](http://actsmart.act.gov.au/news-and-events).
- Borrow an energy kit from public libraries across the ACT to check your home. The kit has everything you need to assess your current energy and water usage. For more information, call Access Canberra on 13 22 81.
- Get an energy concession through the Utilities Concession Scheme for low income households. Eligible households include Centrelink Pensioner Concession Card holders, Low Income Health Care Card holders, Veteran's Affairs Pensioner Concession Card holders or Gold Card holders. For more information, contact your energy provider. Once people know what they need to do to save energy, the following options are available through government programs.
- The Actsmart Solar for Low Income program provides a subsidy of up to 60% off the total cost of a rooftop solar system, as well as an interest free loan to pay off the remaining costs. Contact Actsmart on 13 22 81 or [actsmart@act.gov.au](mailto:actsmart@act.gov.au).
- Low income households can receive thousands off the purchase price to upgrade old, inefficient heating systems to a high efficiency fixture through the Energy Efficiency improvement Scheme (EEIS). For more information please contact ActewAGL Energy Shop on 62800994 or Climate Master on 62281126.
- The *No Interest Loans Scheme*, can provide \$300 for energy efficient refrigerators, \$200 for freezers, and \$500 for split systems as well as \$200 for a limited number of washing machines. To find out more, call Care Financial Services on 02 6257 1788 or The Salvation Army on 0437 723 863.
- A program is underway to replace 200 old, inefficient heaters in public housing with high efficiency systems is underway. This aims to significantly reduce energy costs for public housing tenants. This program will be delivered to pre-selected Housing ACT premises as part of a trial. For more information, please contact Housing ACT on 02 6207 9183.
- Businesses can save up to 60% on lighting electricity bills through energy efficient lighting upgrades. Free or substantially discounted lighting upgrades are available through the ActewAGL Big Business Light Switch.
- Rebates of up to \$5,000 are available through the Business Energy and Water Program to eligible ACT businesses wanting to upgrade to more water-efficient and energy-efficient technologies. Call 13 22 81 or email [businessenergy@act.gov.au](mailto:businessenergy@act.gov.au)

People who are having trouble paying bills can access financial support:

- Access an annual rebate of up to \$604 is available to help eligible customers with utility bills, including water, sewage, gas and electricity. This utilities concession is for both home owners and renters who hold eligible concession cards.
- ActewAGL's Energy Support Fund provides direct support through a system of vouchers to assist vulnerable customers with their energy bills. The vouchers are distributed by community groups that provide emergency relief services. The fund includes contributions of \$250,000 by both the ACT Government and ActewAGL. For more information, please contact ActewAGL 1300 136 008.

# ENVIRONMENT, PLANNING AND SUSTAINABLE DEVELOPMENT

## ASSEMBLY BRIEF

### ISSUE: Electricity and Gas price increases

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#### Context

The Independent Competition and Regulatory Commission (ICRC) released its retail electricity pricing decision for 2017-18 on 7 June 2017. This decision applies to regulated retail electricity tariffs offered by ActewAGL Retail from 1 July 2017. ActewAGL Retail has also announced an increase in residential gas prices of 17.3 per cent in 2017-18.

#### Talking Points

##### Electricity price increase

- The ICRC's final decision provided for an 18.95 per cent increase in ActewAGL Retail's regulated retail electricity tariffs from 1 July 2017.
- This is a significant increase which means that an annual electricity bill for a typical four person household (consuming 8,000 kWh) will increase by approximately \$333 in 2017-18. The annual electricity bill for such a household will be approximately \$2,089 (including GST) in 2017-18.
- Unfortunately, this increase comes at a time when gas prices are also rising significantly. However, despite these increases, it is also important to note ACT consumers continue to have access to some of the lowest retail electricity prices in Australia.
- Rising wholesale electricity costs are the primary contributor towards this increase. The recent shutdown of the Hazelwood power station in Victoria had the effect of reducing supply, causing wholesale prices to rise across the National Electricity Market.
- The price increases are a direct outcome of the failure of the Federal Government to provide investor confidence in the sector meaning new, modern, low carbon generators are not being built as ageing coal generators retire.
- The ACT community isn't the only one feeling this impact. Significant increases in electricity prices similar to the ACT have also been observed in other parts of Australia.

##### The cost of the ACT's renewable energy policies

- Approximately 10 per cent of the 2017-18 regulated retail electricity price can be attributed to the ACT's Feed-in Tariff schemes. ACT electricity consumers have been paying this gradual contribution towards the 100 per cent by 2020 renewable electricity target.
- The Government has been very open about the costs of moving to 100 per cent renewable electricity, and remains confident that these costs will be less than originally modelled in 2012.
- The contract mechanism the Government has used to secure large-scale renewable electricity generators is helping offset the impact of rising wholesale costs.
- The ACT pays the difference between the feed-in tariff price and the wholesale market price. If wholesale prices rise, then ACT consumers pay a smaller feed-in tariff support payment.
- The ACT is on-track to achieve its 100 per cent by 2020 renewable electricity target, which is one of the most ambitious targets globally. It continues to have broad community support, despite the modest associated cost.

##### Action to reduce electricity price pressures

- The ACT Government is helping households and businesses to manage their energy costs.

- Eligible households in the ACT can apply for an annual rebate of up to \$604 to assist with utility bills, including water, gas and electricity.
- We provide comprehensive information, tools and programs to help households and businesses manage their energy costs and usage. Households and businesses can visit [www.actsmart.gov.au](http://www.actsmart.gov.au) or call 13 22 81 for free information and advice on the energy savings opportunities available.
- The Government has supported the establishment of an Energy Consumer Advocate, to provide the community with a voice in decision making processes like the ICRC retail electricity price decision process.
- The ACT Government will continue to maintain price regulation on retail electricity prices. Without this, we would have no basis to scrutinise and keep a lid on electricity prices.
- The ACT Government is also investing in energy efficiency, which has never been more cost effective for consumers. The Energy Efficiency Improvement Scheme is saving participating households around \$5 per week on average, and it has a particular focus on energy savings in low income priority households.
- The ACT Government has made a contribution of \$250,000 to the ActewAGL Energy Support Fund, thereby ensuring up to \$500,000 will be available to help consumers struggling with their energy bills.
  - This fund is providing vouchers to community groups that provide emergency relief services, for distribution to vulnerable Canberrans to help with their energy bills.
  - ActewAGL has established a dedicated 'Bill Help hotline', which provides a central point of contact for customers to access the range of support options and information on rebates, concessions and energy saving advice.
  - It has also established a solar grants program for eligible community organisations, which will help cut energy bills for groups that provide vital community services.
  - As at 31 January 2018, approximately 1120 vouchers have been issued. Care Financial Counselling Service has been the largest issuer of vouchers to date.

### Rising gas prices

- ActewAGL Retail recently announced that residential gas prices will increase by 17.3 per cent in 2017-18. Unlike electricity prices, gas prices are not regulated in the ACT.
- This will mean that a typical household consuming 43 gigajoules (GJ) of gas from ActewAGL Retail will see their annual gas bill rise by approximately \$250.
- The increase in gas prices is driven by rising wholesale costs. These costs have almost doubled over the past year driven by rising gas exports from the east coast of Australia.
- Using the threat of gas export controls, the Commonwealth Government has secured agreement from major gas producers to ensure sufficient gas supply is made available to domestic consumers to avoid the risk of a gas supply shortfall in 2018.
- Prices are also being exacerbated by a lack of competition between suppliers and pipeline operators. The COAG Energy Council has initiated a range of reforms to ensure efficient prices flow through to customers.

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### **Background**

The ICRC is the ACT's independent price regulator for retail electricity prices. Gas prices in the ACT have not been regulated since 2004.

## ENVIRONMENT, PLANNING AND SUSTAINABLE DEVELOPMENT ASSEMBLY BRIEF

### ISSUE: The release of the OCSE Implementation Status Report on ACT Government's Climate Change Policy

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#### Context

Progress on implementing the ACT's climate change strategy, AP2, will be subject to independent assessment and reporting by the Office of the Commissioner for Sustainability and the Environment (OCSE) through the publication of Implementation Status Reports (ISR) every three years from 2014 to 2020. Each ISR will assess performance against the achievement of AP2 outcomes.

The Minister for Climate Change and Sustainability tabled the ISR in the Legislative Assembly on 26 October 2017. A government response to the ISR will be tabled in the first half of 2018.

#### Talking Points

- I received this ISR from the Commissioner for Sustainability and the Environment on 15 September 2017 and tabled it in the Legislative Assembly on 26 October 2017.
  - In February this year I asked the OCSE to audit and report on the status of actions under the ACT's climate change strategy and action plan, AP2. I also asked OCSE to report on how the ACT is tracking on greenhouse gas emissions reduction toward our targets.
  - The report follows an internal review of actions under AP2 that was completed and published at the end of 2015.
  - The OCSE audit shows that the Government has continued to implement the actions of AP2, and to adapt and adjust our responses to take advantage of changes in technology.
  - Although I asked OCSE to assess the implementation of the actions against four status categories: completed, ongoing, modified and subsumed; the report contains a fifth status titled "of concern". Only two actions fell into this category; making information available to prospective tenants on energy efficiency features in rental accommodation and the development of a broader community engagement strategy. Both of these issues are currently being addressed.
  - The report states that the ACT Government has been a leader and driver of climate change policy and action in the Australian context. The audit found that the actions are progressing satisfactorily.
  - The report presents seventeen recommendations to Government which we are being considered. Eight address proposed changes to the way we develop, fund and implement policies to address climate change, one recommendation addresses the carbon offsets policy which is Appendix A to AP2, three relate to the ACT emissions inventory and five to the future of the ACT's Carbon Neutral Government program.
  - I will table a Government response to these recommendations within the 6 months timeframe required under the *Commissioner for Sustainability and the Environment Act 1993*.
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## Background

The report recommendations are:

### Recommendation 1

Budget appropriation for climate change mitigation and adaptation policies will be significant, cannot be postponed and must be consistent.

### Recommendation 2

Energy efficiency initiatives are crucial in delivering climate change outcomes and must be prioritised in policy development.

### Recommendation 3

Climate change mitigation and adaptation policies must be embedded and integrated across whole of government functions.

### Recommendation 4

Transport is the biggest climate change mitigation challenge for the ACT and significant commitment to policy development, action and targets will be central to the ACT continuing its reputation as a climate change policy leader and driver of change.

### Recommendation 5

Community engagement in discussions about climate change policy is fundamental to effective interventions in respect of mitigation and adaptation.

### Recommendation 6

Commitment to social equity in the face of climate change challenges must be strengthened in all new policy initiatives.

### Recommendation 7

To effectively meet immediate and evolving climate change challenges, policy must be timely, focused by means of multi-sectoral short, medium and long term targets.

### Recommendation 8

Climate change policy actions and targets must continue to be monitored and evaluated in open. Transparent and independent review and audit processes.

### Recommendation 9

Engage the community in meaningful conversation about the credibility and validity of investing in offsets to support carbon neutrality against other investment options.

### Recommendation 10

Develop a Basis of Preparation end to end process manual for the ACT emissions inventory to ensure ongoing accuracy and repeatability of ACT emissions monitoring and reporting.

### Recommendation 11

Conduct and audit of ACT emissions inventory to ensure accuracy and facilitate continuous improvement, initially in 2 years time and at regular intervals thereafter.

### Recommendation 12

Identify energy productivity and/or efficiency targets in conjunction with emissions reduction targets at 5 to 10 year intervals out to 2050 to optimise sustainability outcomes.

### Recommendation 13

Ensure that adequate and permanent resources are committed to the Carbon Neutral Government Program, both in the central facilitation team and within agencies.

### Recommendation 14

In line with national best practice, consider reporting significant Scope 3 emissions associated with ACT Government operations and clearly document their inclusions or exclusions in carbon neutral aspirations.

### Recommendation 15

Produce an emissions boundary diagram for each agency to improve transparency and rigor in reporting emissions and developing mitigation strategies.

### Recommendation 16

Ensure ongoing improvement to document processes for government agency greenhouse gas inventories to ensure integrity and efficiency of initiatives.

### Recommendation 17

Improve awareness and ease for applications to the Carbon Neutral Government Loan Fund.

# ENVIRONMENT, PLANNING AND SUSTAINABLE DEVELOPMENT

## ASSEMBLY BRIEF

### ISSUE: Solar for Low Income Program

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#### Context

The Actsmart Solar for Low Income Program has received \$2 million in funding over four years to provide greater support to eligible ACT households to invest in rooftop solar panels to help reduce their energy costs, and reduce greenhouse gas emissions.

#### Talking Points

- The Actsmart Solar for Low Income Program received budget funding of \$2 million over four years, officially launched by the former Minister for the Environment and Climate Change, Simon Corbell on 20 July 2016.
- Following policy and program development an open tender process was undertaken in August 2017. ActewAGL were the successful respondent, with a contract awarded in December 2017.
- The program was launched to the public on 19 December 2017 at the site of the first rooftop solar installation.
- There has been significant interest in the program with 170 householders registered. Of these, 120 participants have been referred to ActewAGL to commence round one, with the remaining added to the waiting list for round two (commencing in July 2018 at the latest).
- Eligibility for the first round is open to Australian Government Pensioner Concession card holders who own their home and do not already have rooftop solar.
- Most households will receive a partial subsidy of up to 60% (capped at \$3,000) for the supply and installation of a rooftop solar system.
- There will be a limited number of full subsidy installations (20 in the first year) which will be focussed on vulnerable households, including those on life support/medical equipment. Availability of the full subsidies is not being advertised to the public.

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#### Background

- While there has been a large uptake of residential solar energy within the ACT, low-income households without access to the initial capital to purchase and install equipment are often not able to take advantage of this technology. The Solar for Low Income Program has been designed to remove the cost barriers and enable uptake by some of the most vulnerable in the ACT community and therefore most affected by both energy price increases and weather extremes.
  - This program will be delivered through a combination of a generous subsidy of up to 60% (capped at \$3,000) as well as the option for householders to access an interest free loan to pay off the remaining costs. The program has been designed so that a majority of households who take advantage of the interest free loan should be able to save more money off their electricity bill as a result of their new solar system compared to their loan repayments. It has been estimated that households will save approximately \$300-\$900 per year.
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# ENVIRONMENT, PLANNING AND SUSTAINABLE DEVELOPMENT

## ASSEMBLY BRIEF

### ISSUE: Community Zero Emissions Grants Program

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#### Context

The Community Zero Emissions Grants Program was announced on 25 May 2017 by Minister for Climate Change and Sustainability Shane Rattenbury. The grants meet a Government commitment to support the community's transition to net zero emissions by 2050 at the latest. On 1 November 2017 Minister Rattenbury announced the six projects which were successful in securing funding for Round One of the program.

#### Talking Points

- The Community Zero Emissions Grants Program provides \$550,000 over four years to eligible community groups and individuals for innovative projects, initiatives and programs which will assist the ACT's transition to net zero emissions by 2050 at the latest.
- Up to \$25,000 (excluding GST) will be available to eligible individual applicants and up to \$50,000 (excluding GST) for joint applications.
- The program supports locally based, community driven projects which encourage real change in ACT communities.
- Applications for round one closed on Thursday 27 July 2017 and 19 applications were received.
- The six successful projects to receive funding for Round One are detailed below.
  - The Neighbourhood Effect received \$25,000 to develop a free, interactive smartphone app and website to encourage the use of sustainable lifestyle habits, products and initiatives.
  - Unions ACT will receive \$24,785 to establish a deep-engagement program to recognise and promote positive changes to reduce carbon emissions in the workplace and home. Yet to receive the executed deed from Unions ACT – once received funding will be received.
  - Canberra Environment Centre received \$24,200 to purchase a solar powered composter to service the Acton community's composting needs.
  - Woden Community Service will receive \$23,000 to train young people to fix and build bicycles which will then be donated to disadvantaged members of the community.
  - SEE Change received \$22,160 to engage project home builders and developers to build more sustainably and promote living with a smaller environmental footprint.
  - Australian Dance Party received \$21,550 to change perceptions and behaviours through a dance, short film and community awareness campaign.
- The evaluation panel was made up of four individuals:
  - Dr Penny Sackett, Council Deputy Chair, Climate Change Council
  - Stephen Bygrave, Executive Director, Climate Change and Sustainability, EPSDD
  - Emma Humphreys – Manager Low Income and Community Programs, EPSDD
  - Anna McGuire – Policy Officer, Climate Change, EPSDD
- A/g Director General EPSDD, Dave Peffer, was the delegate for Round One of the Program.
- The attached table has been updated to include the period 1 July 2017 to 19 January 2018.



## Background

- The grants are delivered through annual targeted rounds. Up to \$150,000 was allocated for Round One in 2017/18 to support on-the-ground actions across the energy, buildings, transport, land use and waste sectors. Support was also available for projects that engage and educate the wider community about how they can reduce their own emissions footprint.
- The Community Zero Emissions Grants Program is designed to fund projects and activities that will:
  - assist the community transition to net zero emissions;
  - develop and implement innovative solutions across the community to reduce greenhouse gas emissions;
  - generate new knowledge or information to facilitate local solutions to transition to zero emissions; and
  - develop innovative solutions to engage the community on zero emissions.
- The Program supports Parliamentary Agreement Item 6.1 on the target of net zero emissions by 2050 at the latest.

<b>Actsmart Household Programs - Community Zero Emissions Grants Program</b>			
<b>Program</b>	<b>Purpose</b>	<b>2016/17 Outputs</b>	<b>2017/18 Outputs (as at 19 January 2018)</b>
Community Zero Emissions Grants Program	<p>The Community Zero Emissions Grants Program is designed to fund projects and activities that will:</p> <ul style="list-style-type: none"> <li>• assist the community transition to net zero emissions</li> <li>• develop and implement innovative solutions across the community to reduce greenhouse gas emissions</li> <li>• generate new knowledge or information to facilitate local solutions to transition to zero emissions</li> <li>• develop innovative solutions to engage the community on zero emissions.</li> </ul>	<p>The Community Zero Emissions Grants Program was announced on 25 May 2017 by Minister for Climate Change and Sustainability Shane Rattenbury.</p>	<ul style="list-style-type: none"> <li>• 19 applications were received for the grant program.</li> <li>• 6 projects have been approved for funding for the first round of the Program.</li> <li>• Funding for the successful projects totals \$140, 695.</li> <li>• 5 projects have executed Deeds.</li> <li>• Unions ACT negotiated the Terms of the Deed with Territory. A decision from Unions ACT on the negotiated Terms is still pending.</li> </ul>

# ENVIRONMENT, PLANNING AND SUSTAINABLE DEVELOPMENT

## ASSEMBLY BRIEF

### ISSUE: EEIS Programs and Services supporting the ACT community

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#### Context

The Energy Efficiency Improvement Scheme (EEIS) requires electricity retailers to achieve energy savings in households and small-to-medium enterprises. The Scheme also provides targeted assistance to low income households through a 20% Priority Household Target.

#### Talking Points

- The Energy Efficiency Improvement Scheme (EEIS) will operate until 2020 with new activities for businesses and households being phased in.
- The 20 per cent Priority Household Target has been retained for 2018.
- EPSDD and CSD have commenced a new joint initiative to improve the energy efficiency of 200 ACT public houses. This initiative helps low income households reduce energy use, bills and emissions by replacing old, inefficient heaters with high efficiency systems, including more efficient electric heat pumps. This will significantly reduce energy costs for some of ACT's most vulnerable households and help them adapt to a changing climate.
- A new Regulation commenced on 1 January 2018 to expand the classes of priority households. Holders of an expanded range of concession cards, tenanted public houses and not-for profit community, disability and aged care housing all qualify as priority households. Referral agencies including the ACT Civil and Administrative Tribunal, Care Inc, St Vincent de Paul Society and the Salvation Army can also classify and refer people to ActewAGL, as priority householders,
- Codes of practice for proposed new insulation activities are being developed to detail health and safety requirements. Consideration is also being given to introducing top-up and wall insulation activities.
- An independent review of the EEIS is being undertaken to understand how well the EEIS is working, to what extent it has achieved its statutory objectives so far whether it remains appropriate for the future and how it could be improved. Point Advisory are undertaking the review and there are many opportunities to contribute. Contact the EEIS team on [EPD-EEIS@act.gov.au](mailto:EPD-EEIS@act.gov.au) to learn more.
- The EEIS is a key mechanism for delivering on the ACT's 40% emission reduction target by 2020 as it meets the strategic priority of helping households and businesses reduce emissions and electricity costs.
- Since the EEIS started in 2013, more than 70,000 households and businesses have participated in the Scheme, including more than 17,800 priority low income households.
- Over 1,190,000 energy saving items have been installed to date under the EEIS, saving over 739,000 tonnes of greenhouse gas emissions.

- Over 1,000 Canberra businesses have received 63,000 energy efficient lighting upgrades in 2017, saving more than 21,000 tonnes of carbon dioxide equivalent emissions (tCO<sub>2</sub>e). The installed items have the potential to save around \$24.3 million over ten years.
- Energy efficient lighting upgrades can save up to 60% of business lighting energy bills and the program is expected to save approximately 40,000 tCO<sub>2</sub>e in 2017.
- Energy efficiency savings from the EEIS in 2020 are estimated to be \$3.20 per week on average across all ACT households, with participating households saving around \$5.00 per week.
- Over 50 Canberra suburbs have participation rates in the EEIS of 30% or higher.
- As a result of the EEIS, approximately 50 fulltime equivalent staff and contractors are employed to deliver energy efficiency programs, including 30 electricians and 20 plumbers.
- ActewAGL is hiring local electricians for EEIS delivery. Local businesses are expected to save around \$191 million in energy bills as a result of EEIS energy efficiency upgrades.
- ActewAGL is continuing to provide residents with a range of EEIS activities to help manage their energy consumption. These include ActewAGL's Fridge Buyback scheme and offering rebates to replace poor performing heaters with high efficiency heaters. EEIS activities that save gas reduce more greenhouse gas emissions than those that only target electricity savings. All EEIS activities are contributing to the ACT's goal of net zero emissions by 2050, at the latest.

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## Background

- The Energy Efficiency Improvement Scheme (EEIS) was established under the *Energy Efficiency (Cost of Living) Improvement Act 2012* and began on 1 January 2013 and is currently legislated until December 2020.
- The Act sets a Territory-wide energy savings target and obligates ACT electricity retailers to meet an individual Retailer Energy Savings Obligation by undertaking activities in households or small-to-medium enterprises. Smaller Tier 2 retailers can achieve their obligation by paying an 'Energy Savings Contribution'.
- Energy Australia was the only Tier 2 retailer which delivered activities during the 2017 compliance period. All other Tier 2 retailers opted to pay an 'Energy Savings Contribution' in lieu of undertaking activities to meet their 2017 compliance period obligations. Energy Savings Contributions offset the cost of administering the EEIS and fund complementary programs such as Actsmart Energy Programs and Solar for Low income Households.

# ENVIRONMENT, PLANNING AND SUSTAINABLE DEVELOPMENT

## ASSEMBLY BRIEF

### ISSUE: Sustainability Programs

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#### Context

EPSDD delivers ten major sustainability programs under the Actsmart banner across the household, low income household, business, schools and community sectors.

#### Talking Points

- There were 9 successful projects for the 2017/18 round of the Community Gardens Grants program, which was announced on 8 November 2017. As well as establishing new community gardens, the grants will go towards providing upgraded irrigation, replacing equipment and enhancing plantings in existing gardens. One of the successful projects will also be providing an insight into traditional Indigenous medicines.
- During February 2017, the Actsmart programs team engaged more than 2,000 members of the public through participation at the National Multicultural Festival and the Canberra Show. This gave the team the opportunity to promote programs and climate change/sustainability initiatives of Government.
- Funding for the energy related programs has been appropriated by Treasury from the Energy Efficiency Improvement Scheme (EEIS) – Tier 2 funding until June 2018. Funding for non-energy programs is received through budget appropriation until June 2018.
- These programs support policies including the Greenhouse Gas Targets legislation, the climate change strategy (AP2), the Sustainable Energy Policy, the ACT Water Strategy and the ACT Waste Management Strategy.
- The table attached provides details of Actsmart programs, their purpose and delivery mechanism and participation levels.
- The programs are regularly evaluated to ensure they remain relevant and do not overlap with other programs offered by industry or other government agencies. Programs are flexible and developed using evidence based project planning.
- The use of social media via Facebook and Twitter was introduced in May 2015 and has created new avenues for the community to access information and engage on sustainability and climate change matters. Engagement has increased steadily through this cost effective engagement channel.
- The Actsmart Business team are working with the City Activation team to improve functionality in key CBD laneways. Implementing streamlined waste services will result in improved resource recovery, less truck trips within the laneways and cleaner, less cluttered and more aesthetically pleasing laneways for the public and for events run through City Activation team. A development application for the building of a shared waste enclosure has been submitted for both the Melbourne and Sydney buildings. Extensive engagement has been undertaken

with the traders and owners of both of these buildings. TCCS has approached the team to develop a similar model as part of the upgrade works at the Kambah shops.

- Statistics in the table are updated quarterly. The attached table has been updated to include the period 1 July 2017 to 30 September 2017.
  - Actsmart Schools has expanded the waste program to include a focus on waste-free lunches which complements the ACT Health Directorate Fresh Tastes program.
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## **Background**

The programs are supported by the ACT Government's Sustainability Hub – the Actsmart website. The Actsmart website, launched in February 2015, delivers information and advice on how Canberrans can take action via community sectors ie Households, Business, Schools and Community.

The Actsmart website is designed to be a one-stop shop for sustainability for the community making information simple and encouraging action.

The Actsmart programs are also supported via social media including Facebook and Twitter. Event details and good news stories from Actsmart businesses, schools and residents are promoted and shared using social media.

The Actsmart programs are supported by key events throughout the year including:

- The Annual Business Sustainability Awards (Awards) recognise the sustainability contributions of Actsmart businesses and public event holders and has been running since 2010. At the most recent event, held in May 2017, more than 150 business clients attended with 13 awards presented from over 60 nominations. This years event will be held on Thursday 24 May 2018.
  - A champion's breakfast was held in 2016 where invited clients not currently participating in the Business programs heard from Actsmart champions on how they successfully rolled out the programs in their workplace. Feedback was excellent and the event was trialled as a lunch at the 2017 Annual Business Sustainability Expo (Expo).
  - The Annual Business Sustainability Expo provides businesses and public event organisers with a holistic approach to sustainability, with exhibitors showcasing the latest products and services to assist with energy and water efficiency and better waste management. The Expo has been running since 2012 and has the Canberra Business Chamber as a partner. The 2017 Expo was held in September 2017, had almost 400 attendees and was our most successful Expo to date. The event featured a main stage program, displays of the latest green products and services, interactive workshops, inspirational speakers and networking opportunities.
  - The Actsmart Schools Earth Hour Competition Awards was held in May 2017 at the Legislative Assembly. The competition attracted 58 entries which included posters, poems and social media posts submitted by primary, secondary and college students. Entries showcased innovative activities undertaken during School Earth Hour by the whole school. The competition gave schools and individual students the opportunity to creatively express their commitment to a sustainable ACT—and, by extension to the global action for climate change.
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<b>Actsmart Household Programs</b>			
<b>Program</b>	<b>Purpose</b>	<b>2016/17 Outputs</b>	<b>2017/18 Outputs (as at 31 December 2017)</b>
Low Income Home Energy Efficiency Program	<ul style="list-style-type: none"> <li>To assist low income households in the ACT to improve the energy efficiency of their homes, reduce their energy and water consumption, reduce their energy and water bills, and contribute to reducing greenhouse gas emissions.</li> </ul>	<ul style="list-style-type: none"> <li>1271 low income households assisted.</li> <li>567 in home energy assessments and draught proofing</li> <li>704 people assisted through workshops/education sessions.</li> <li>88 No Interest Loan Scheme subsidies to 74 applicants (some received more than one subsidy).</li> </ul> <p><b>Savings:</b></p> <ul style="list-style-type: none"> <li>Energy: 328 MWh annual savings. Greenhouse gas emissions: 132 t CO<sub>2</sub> –e annual savings (not including savings from behaviour change following householder education). <i>*These figures are based on a combination of electricity and gas savings which have different emission factors.</i></li> </ul>	<ul style="list-style-type: none"> <li>A total of 386 households have been assisted.</li> <li>262 in home energy assessments and draught proofing.</li> <li>124 people assisted through workshops/education sessions.</li> <li>23 No Interest Loan Scheme subsidies to 19 applicants (some received more than one subsidy).</li> <li>9,598 low income households assisted by the Low-Income program (formerly Outreach) since the programs commenced in 2010.</li> </ul>
Low Income Split Systems	<ul style="list-style-type: none"> <li>The split system program is delivered by a contractor to low income households to enable them to switch to more energy efficient split systems.</li> <li>Energy Efficient Split systems (80 units in 2016/17) are provided to eligible residents after St Vincent de Paul (SVDP) has conducted a home assessment.</li> </ul>	<ul style="list-style-type: none"> <li>94 split systems installed.</li> </ul> <p><b>Savings:</b></p> <ul style="list-style-type: none"> <li>Energy: 763 MWh annual savings.</li> <li>Greenhouse gas emissions: 230 t CO<sub>2</sub> –e annual savings.</li> </ul> <p><i>*These figures are based on a combination of electricity and gas savings which have different emission factors.</i></p>	<ul style="list-style-type: none"> <li>57 split systems have been installed.</li> </ul>

<b>Actsmart Household Programs</b>			
<b>Program</b>	<b>Purpose</b>	<b>2016/17 Outputs</b>	<b>2017/18 Outputs (as at 31 December 2017)</b>
Curtain Program	<ul style="list-style-type: none"> <li>• The current curtain program is being delivered through St Vincent de Paul's volunteer program.</li> <li>• Eligible households receive up to two sets of curtains in the main living area to reduce heat loss through windows, and improve privacy and comfort.</li> <li>• ACT Government support is through purchasing the material while St Vincent de Paul sources volunteers to make and install the curtains.</li> </ul>	<ul style="list-style-type: none"> <li>• 163 curtains were installed from 1 July 2016 to 30 June 2017.</li> </ul>	<ul style="list-style-type: none"> <li>• Curtains have been installed in 90 households.</li> </ul>
Solar for Low Income	<ul style="list-style-type: none"> <li>• Funding of \$2 million over four years was appropriated in the 2016/17 budget. Provides financial assistance for low income households to install solar panels to maintain equity as energy prices increase and to remove barriers for low income households to benefit from household solar.</li> </ul>	<ul style="list-style-type: none"> <li>• Program was not operating in 2016/17</li> </ul>	<ul style="list-style-type: none"> <li>• The program was launched on 19 Dec 2017.</li> <li>• Systems Installed: 1</li> <li>• Program is fully subscribed and alternative funding being sourced to meet the high demand.</li> </ul>



<b>Actsmart Household Programs</b>			
<b>Program</b>	<b>Purpose</b>	<b>2016/17 Outputs</b>	<b>2017/18 Outputs (as at 31 December 2017)</b>
Wood Heater Replacement Program	<ul style="list-style-type: none"> <li>• Reduces winter air pollution from wood smoke by offering a financial incentive for replacing an old wood heater with new mains supplied natural gas heating.</li> <li>• Program has run since 2004 with gas subsidy offered by ActewAGL.</li> <li>• The option of installation of high efficiency electric heating was funded by EEIS Tier 2 funds (as a trial) in November 2015.</li> <li>• Option for a \$100 rebate to support households with the cost of removal of wood heater without replacement has been added to the program.</li> <li>• 1,114 households have received rebates over the life of the program (2004 – 2016).</li> </ul>	<ul style="list-style-type: none"> <li>• 66 applications received.</li> <li>• 49 applications for new systems approved.</li> <li>• 9 applications for wood heater only removal approved.</li> <li>• 24 rebates claimed including 9 electric, 13 gas and 2 removal only.</li> </ul>	<ul style="list-style-type: none"> <li>• 12 new applications received so far this financial year.</li> <li>• 11 rebates have been paid this financial year. Eight of these were from applications received in 16/17 FY.</li> <li>• 3 rebates for wood heater removal.</li> <li>• 5 rebates for space split system.</li> <li>• 2 rebates for ducted split system.</li> <li>• 1 rebate for gas.</li> <li>• Gas heating systems ineligible for rebate as of 30 June, 2017, with a grace period to the end of December 2017 to claim.</li> </ul>
Actsmart Sustainable Home Advice	<ul style="list-style-type: none"> <li>• A free service providing independent expert energy efficiency advice to Canberra households via an email service, telephone and face to face at public events and workshop delivery.</li> <li>• The service helps residents be more comfortable in their homes while saving energy, money and helping the environment.</li> </ul>	<ul style="list-style-type: none"> <li>• Advice provided through 355 phone/email enquiries.</li> <li>• 1,376 people engaged through workshops and events.</li> <li>• 34 user pay home assessments.</li> </ul>	<ul style="list-style-type: none"> <li>• 164 phone/email enquiries (90 simple, 74 complex).</li> <li>• 11 events/workshops have been held including topics such as 'Understanding solar', 'Draught proofing', 'Efficient Heating' and representations at sustainability events.</li> <li>• 580 people engaged through workshops and events. 15 home assessments conducted</li> </ul>

<b>Actsmart Household Programs</b>			
<b>Program</b>	<b>Purpose</b>	<b>2016/17 Outputs</b>	<b>2017/18 Outputs (as at 31 December 2017)</b>
Actsmart Carbon Challenge	<ul style="list-style-type: none"> <li>Established in 2015, the Carbon Challenge is an online tool to get Canberrans involved in becoming more sustainable at home.</li> <li>Individuals can self nominate in challenges over 6 focus areas including energy, waste, water, transport, food and community.</li> <li>Emission savings/badges earned for completed challenges.</li> </ul>	<ul style="list-style-type: none"> <li>'ACT Primary Schools Carbon Challenge' campaign began in August 2016</li> <li>Students competed in three different challenges to earn emissions savings for their school group. These included:                             <ul style="list-style-type: none"> <li>Peg it out – hang out the washing rather than use the dryer</li> <li>Heater Savvy – maintain home heating between 18-20 degrees</li> <li>Feeling Seedy – grow your own herb garden</li> </ul> </li> <li>Over 1,500 students/households participated in the challenge</li> <li>This campaign saved approximately 2,290 tonnes of CO<sub>2</sub> emissions collectively across 22 schools; equivalent to taking 618 cars off the road for a year.</li> </ul>	<ul style="list-style-type: none"> <li>3,042 registered users for the Carbon Challenge</li> <li>2018 campaign for "ACT Secondary Schools Carbon Challenge" under development. 1 school registered.</li> </ul>

<b>Actsmart Business Programs</b>			
<b>Program</b>	<b>Purpose</b>	<b>2016/17 Outputs</b>	<b>2017/18 Outputs (as at 31 December 2017)</b>
Actsmart Business Recycling program	<ul style="list-style-type: none"> <li>Provides advice, and support via education, stickers, signage and accreditation to the business and office sector to assist in implementing waste reduction and increase recycling aimed at reducing waste to landfill and CO<sub>2</sub> emissions.</li> <li>Program is delivered on a cost recovery basis via a cross border agreement with Queanbeyan-Palerang Regional Council.</li> </ul>	<ul style="list-style-type: none"> <li>910 sites signed up to the program.</li> <li>439 accredited sites.</li> </ul> <p><b>Savings from accredited sites:</b></p> <ul style="list-style-type: none"> <li>15,380 m<sup>3</sup> of mixed recyclables diverted from landfill.</li> <li>16,860 m<sup>3</sup> of paper and cardboard diverted from landfill.</li> <li>1,693 m<sup>3</sup> of organic material diverted from landfill.</li> <li>Emission savings: 6,383 t CO<sub>2</sub>-e (based on above figures).</li> </ul>	<ul style="list-style-type: none"> <li>878 sites signed to the program as at 31 December.</li> <li>442 accredited sites as at 31 December.</li> </ul> <p>Note: Queanbeyan statistics:</p> <ul style="list-style-type: none"> <li>67 sites signed up</li> <li>37 sites accredited.</li> </ul>
Actsmart Public Event program	<ul style="list-style-type: none"> <li>Provides advice to Public Event holders to assist in implementing recycling at their public event.</li> <li>Program was expanded in 2015 to include advice and guides for event holders in broader sustainability including energy, water and transport options.</li> </ul>	<ul style="list-style-type: none"> <li>70 events with over one million visitors.</li> <li>Events included Floriade, National Multicultural Festival, fetes and festivals.</li> </ul> <p><b>Savings:</b></p> <ul style="list-style-type: none"> <li>46,789 kg of mixed recycling collected.</li> <li>10,804 kg organic waste diverted from landfill.</li> <li>Emission savings: 76 t CO<sub>2</sub>-e.</li> </ul>	<ul style="list-style-type: none"> <li>98 events held from 1 July 2017 to 31 December 2017.</li> </ul> <p><b>Savings:</b></p> <ul style="list-style-type: none"> <li>22,961 kg of mixed recycling collected.</li> <li>1,897 kg organic waste diverted from landfill.</li> </ul>

<b>Actsmart Business Programs</b>			
<b>Program</b>	<b>Purpose</b>	<b>2016/17 Outputs</b>	<b>2017/18 Outputs (as at 31 December 2017)</b>
Actsmart Business Energy and Water program	<ul style="list-style-type: none"> <li>• Provides advice and financial assistance for efficiency upgrades to small businesses in the ACT to assist in reducing energy and water consumption.</li> <li>• Offers onsite energy and water assessment and tailored energy and water action plan, with recommendations for efficiency upgrades.</li> <li>• A \$5,000 rebate is available on a 50/50 cost sharing basis to assist businesses with costs of efficiency upgrades.</li> <li>• 682 businesses have participated to the EoFY 2016/17, with 357 claiming the rebate.</li> <li>• Estimated lifetime energy savings from the upgrades installed since program commencement to EoFY 2016/17 are 40,080 MWh, equivalent to the energy used by 5,482 houses a year.</li> </ul>	<ul style="list-style-type: none"> <li>• 204 businesses received an assessment, with 131 sites receiving a rebate in the financial year.</li> </ul> <p><b>Annual savings (estimates for 131 sites who completed retrofits):</b></p> <ul style="list-style-type: none"> <li>• Energy savings: 1,601 MWh.</li> <li>• Business energy bills savings: \$352,200.</li> <li>• Total emission saving: 1,124 t CO<sub>2</sub> –e.</li> </ul>	<ul style="list-style-type: none"> <li>• 70 businesses received an assessment and 43 have received a rebate from 1 July 2017 to 31 December 2017.</li> </ul> <p><b>Annual Savings (estimates for 43 sites who completed retrofits for period 1 July 2017 - 31 December 2017)</b></p> <ul style="list-style-type: none"> <li>• Energy savings: 350 MWh.</li> <li>• Business energy bills savings: \$78,300.</li> <li>• Total emission saving: 157t CO<sub>2</sub> –e.</li> </ul>

<b>Actsmart Business Programs</b>			
<b>Program</b>	<b>Purpose</b>	<b>2016/17 Outputs</b>	<b>2017/18 Outputs (as at 31 December 2017)</b>
Actsmart Medium Business Lighting Efficiency Webtool	<ul style="list-style-type: none"> <li>• Provides businesses with a fast, easy to use self help method for determining what LED lights can be used to replace existing inefficient lighting.</li> <li>• This tool was developed to support medium business but is suitable for use by all businesses.</li> <li>• The Webtool provides estimated capital costs and anticipated dollar savings based on ACT data from LED light upgrades, giving a simple payback period (in years) from the upgrades.</li> </ul>	<ul style="list-style-type: none"> <li>• The Webtool was launched on 1 September 2016.</li> <li>• The Webtool has 9 categories of lights with 22 different lighting types in total.</li> <li>• Interest has been received by other states in acquiring this tool for use in their states.</li> </ul>	<ul style="list-style-type: none"> <li>• 44 businesses have used the Webtool to evaluate lighting upgrade opportunities from 1 July 2017 to 31 December 2017.</li> </ul>

<b>Actsmart Schools Program</b>			
<b>Program</b>	<b>Purpose</b>	<b>2016/17 Outputs</b>	<b>2017/18 Outputs (as at 31 December 2017)</b>
Actsmart Schools Program	<ul style="list-style-type: none"> <li>• 100% of schools (public, private and independent) in the ACT are signed to the program.</li> <li>• Assists schools to: reduce ecological footprint; educate for sustainability through the curriculum; develop a long-term, whole school approach to addressing sustainability; and implement sustainable management practices into everyday school operations.</li> <li>• Schools receive assistance to conduct water, waste and energy audits, a guide to implement actions, then follow-up audits to record reductions in usage.</li> <li>• Offers ACT Teacher Quality Institute accredited professional development activities to Teachers, Facilities Managers, and Senior Students.</li> <li>• Collects and records baseline data from audits on a database for monitoring and reporting progress.</li> <li>• Accredits schools that reduce energy and water consumption and waste to landfill; manage school grounds/biodiversity sustainably and integrate sustainability into the curriculum.</li> <li>• Provides assistance in the delivery of the Education Directorate's - ACT Education Energy Program.</li> </ul>	<ul style="list-style-type: none"> <li>• Five schools received '5 star' accreditation. 43 new accreditations.</li> <li>• Horticulturist visited 32 schools.</li> <li>• Eight workshops held:               <ul style="list-style-type: none"> <li>• 'Sustainability Curriculum' – 33 attendees from 17 schools</li> <li>• 'Senior Eco Bus Tour' –30 attendees from 9 schools.</li> <li>• 'Junior Eco Bus Tour' – 78 attendees from 15 schools</li> <li>• Taqwa Islamic School – 4 participants</li> <li>• 'Sustainability Coordinators' – 45 attendees from 34 schools</li> <li>• 'Sustainable school grounds' – 52 attendees from 45 schools</li> <li>• 'Waste and recycling' – 42 attendees from 15 schools</li> <li>• 'Curriculum' – 45 people from 26 schools.</li> </ul> </li> <li>• 47 school visits for waste/ recycling support.</li> <li>• 32 schools borrowed waste display.</li> <li>• 27 Student Energy Kits delivered.</li> <li>• 19 energy audits completed.</li> </ul>	<p>Four workshops held:</p> <ul style="list-style-type: none"> <li>• Energy and Water Workshop – 26 attendees from 12 schools</li> <li>• Resource Savvy Schools (Actsmart EXPO) – 13 attendees</li> <li>• Senior Schools Eco Bus Tour – 26 attendees from five schools</li> <li>• Junior Schools Eco Bus Tour – 68 attendees from eleven schools</li> <li>• Horticulturist visited eight schools.</li> <li>• 25 schools visited for waste and recycling support.</li> <li>• 16 general school visits.</li> <li>• Sixteen schools borrowed interactive waste display.</li> <li>• Five schools borrowed the compost and worm farm display.</li> <li>• Seven student energy kits delivered.</li> <li>• Eleven new accreditations.</li> <li>• Six school case studies developed.</li> </ul>

<b>Community Programs</b>			
<b>Program</b>	<b>Purpose</b>	<b>2016/17 Outputs</b>	<b>2017/18 Outputs (as at 31 December 2017)</b>
Community Partnerships	<ul style="list-style-type: none"> <li>From 1 July 2013, Service Funding Agreements with SEE-Change, Canberra Environment Centre and the Conservation Council are managed by Sustainability Programs in the Climate Change and Sustainability Division.</li> <li>Operational funding is provided to these organisations under the Agreements to:               <ul style="list-style-type: none"> <li>protect and enhance the natural systems in the ACT and surrounding region</li> <li>promote a sustainable and zero net emission society</li> <li>increase awareness of and participation in environmental issues.</li> </ul> </li> </ul>	<p><b>SEE-Change</b></p> <ul style="list-style-type: none"> <li>32 Newsletters / 16 mailouts to approx 1,600 people</li> <li>74 programs/events/activities</li> <li>984 Facebook likes</li> <li>276 Twitter followers</li> </ul> <p>Activities included:</p> <ul style="list-style-type: none"> <li>Solar House Day</li> <li>Sustainable house tours</li> <li>Chook co-op workshop</li> <li>ACTCOSS Conference presentation</li> <li>Food and fuel security talk</li> <li>Floriade talks</li> <li>Curtain retrofit workshops</li> <li>SEE-Change group meetings to foster grass roots sustainability projects</li> <li>Houseblitz workshop</li> <li>Bike trailers hire</li> <li>Ecological footprint competition</li> <li>Wetlands restoration and education</li> <li>Transition Streets program</li> </ul>	<p>Reporting for the period of Jul-Sep 2017 has been received. Reporting for Oct-Dec 2017 will be provided in early Feb 2018.</p> <p><b>SEE-Change (Jul-Sep 2017)</b></p> <ul style="list-style-type: none"> <li>6 Newsletters to 1,600 people</li> <li>6 events (including sustainable wardrobe)</li> <li>2 Sustainable House Days (Latham and Coombs)</li> </ul> <p><b>Canberra Environment Centre</b></p> <ul style="list-style-type: none"> <li>Fortnightly newsletter to 2,714 people</li> <li>Average of 5 social media posts/week to 5,000 people</li> <li>17 workshops/events (including “Halving your household waste” and “Seed Saving” workshop”).</li> </ul> <p><b>Conservation Council ACT</b></p> <ul style="list-style-type: none"> <li>Monthly email bulletin (Yellow Box Dispatch) to over 4,500 people.</li> <li>Weekly wrap distributed to 105 member group representatives</li> <li>1,239 Facebook likes</li> <li>917 Twitter followers</li> <li>50 stakeholder meetings</li> <li>6 submissions/commentaries (including “Water Issues in the ACT” and “Murray-Darling Basin – Water Management”</li> <li>2 forums</li> </ul>

<b>Community Programs</b>			
<b>Program</b>	<b>Purpose</b>	<b>2016/17 Outputs</b>	<b>2017/18 Outputs (as at 31 December 2017)</b>
		<p><b>Canberra Environment Centre</b></p> <ul style="list-style-type: none"> <li>• Fortnightly newsletters to over 2,200 people</li> <li>• Average of 4 social media posts/week to over 3,300 people.</li> <li>• 65 workshops/events</li> </ul> <p>Activities included:</p> <ul style="list-style-type: none"> <li>• Held Canberra Harvest Festival in March 2017, with approximately 1000 participants.</li> <li>• Weekly garden tours for community and school groups. Garden also hosts a disability employment project.</li> <li>• Development of communal composting system at Stromlo Terrace units.</li> <li>• Establishment of food garden in new Wanniasa housing complex.</li> <li>• Weekly visits to child care centres as part of the Grow Together program (reduce waste/increase nutrition).</li> <li>• Commenced 6 month work for the dole program, to rejuvenate and extend the ANU community garden working with 100 people.</li> </ul>	



<b>Community Programs</b>			
<b>Program</b>	<b>Purpose</b>	<b>2016/17 Outputs</b>	<b>2017/18 Outputs (as at 31 December 2017)</b>
		<p><b>Conservation Council ACT</b></p> <ul style="list-style-type: none"> <li>• Monthly email bulletin (Yellow Box Dispatch) to approx 4,500 people.</li> <li>• 1,204 Facebook likes</li> <li>• 861 Twitter followers</li> <li>• Over 200 stakeholder meetings</li> <li>• 8 forums</li> <li>• 36 submissions/commentaries</li> </ul> <p>Submissions and commentary included;</p> <ul style="list-style-type: none"> <li>• Policy on kangaroo management,</li> <li>• National Park Feasibility Reference Group;</li> <li>• ACT Region Food Council: Draft Terms of Reference and Governance Principles; and</li> <li>• Parliamentary Agreement for 9th Legislative Assembly of the ACT</li> </ul>	

## ENVIRONMENT, PLANNING AND SUSTAINABLE DEVELOPMENT ASSEMBLY BRIEF

### ISSUE: Renewable energy programs

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#### Context

The Environment, Planning and Sustainable Development Directorate (EPSDD) is progressing a number of programs aimed at meeting the Territory's 100% renewable electricity target and developing Canberra as a centre for renewable energy investment and innovation.

#### Talking Points

##### Large scale renewables and progress to 100 per cent

- In 2016-17, 29.1% of the ACT's electricity supply was from renewable sources. This will increase to around 52% for 2017-18, and is expected to reach around 78% for 2018-19. The figure will move toward 100% over the next two years as the remaining large-scale wind and solar farms are completed. All contracts are on-track to secure the 100% target by 2020.

##### Next Generation Energy Storage program

- The \$25 million Next Generation Energy Storage Grants program is supporting the roll out of up to 5,000 solar battery storage systems to 2020 in Canberra homes and businesses. These systems will also collect critical data to inform industry research and development.
- The number of systems installed to-date is around 500, with the rate of installation expected to increase in 2018. Following from the first two grants rounds, the successful companies of a third grants round were announced on 18 January 2018. This third grants round allocates around a further \$3 million to continue supporting the battery roll-out.
- Focusing on energy storage for homes and businesses, as opposed to large grid-scale batteries, provides a number of advantages. It allows the ACT to maximise the comparative advantage it has in the development of small-scale renewable energy technology, and it supports the progressive ACT community that is willing to support the installation of battery technology.
- Each system installed is required to meet specific 'smart' requirements and collect critical data to inform industry research and development. The Virtual Power Plant recently trialled by Reposit Power and Evoenergy is a good example of how the mandated 'smart' requirements of the program are stimulating innovation in the local renewable energy industry.

##### Local industry development

- The renewable auctions also leveraged more than \$500 million in local investment:
  - Around two gigawatts of renewable energy is managed from Canberra's renewable energy precinct, which includes leading national and international renewable energy companies such as Neoen, Global Power Generation (GPG), CWP Renewables and Windlab.
  - The \$12 million Renewable Energy Innovation Fund is supporting the Hub, a collaborative co-working space in Canberra's renewables precinct. In its first year of operation, the hub helped 30 businesses and held more than 80 industry events.

- The innovation fund is also providing up to \$2 million in seed funding to help local start-ups to develop and commercialise new technology, including new household battery controls, hydrogen fuel cells and solar radiation forecasting.
- The Renewable Energy Skills Centre of Excellence at CIT is now offering Australia's only Global Wind Organisation accredited wind safety and technical training.

If asked: Large-scale Generation Certificate (LGC) surrender

- There has been no voluntary surrender of the ACT's LGCs to-date as the Commonwealth Government has been unable to confirm its previous commitment that voluntary surrenders would be additional to national emission reduction targets. It is anticipated that this issue will be clarified through the negotiation of the National Energy Guarantee.

If asked: Community solar

- SolarShare submitted a new proposal for a Community Solar Scheme in May 2017, and supplementary information was submitted in January 2018. SolarShare proposes building a one megawatt community solar farm next to the existing Mount Majura Solar Farm. The Government is currently assessing the technical and financial risks of the project.

## Background

Large scale renewables and progress to 100 per cent

- Approximately 75% of the 100% renewable electricity target will be achieved through generation secured as part of the Government's award winning reverse auction program for large-scale wind and solar. The remaining 25% will be delivered through GreenPower purchases, roof-top solar generation and the ACT's share of the national Renewable Energy Target (RET).

The ACT's large-scale renewable energy projects are summarised below.

	<i>Location</i>	<i>% of 2020 elec. demand</i>	<i>Capacity (MW)</i>	<i>FiT – (\$/MWh)</i>	<i>FiT start</i>
<b>Solar Auction</b>					
Royalla solar farm	ACT	1.2%	20	\$186.00	18-Aug-14
Maoneng solar farm	ACT	0.7%	13	\$178.00	18-Nov-16
Williamsdale solar farm	ACT	0.5%	7	\$186.00	3-Feb-17
<b>First Wind Auction</b>					
Ararat wind farm	Ararat, VIC	8.9%	80.5	\$87.00	14-Apr-17
Coonooer Bridge wind farm	Bendigo, VIC	2.7%	19.4	\$81.50	28-Feb-16
Hornsedale 1 wind farm	Port Augusta, SA	13.6%	100	\$92.00	16-Feb-17
<b>Second Wind Auction</b>					
Hornsedale 2 wind farm	Port Augusta, SA	13.2%	100	\$77.00	01-Dec-18
Sapphire 1 wind farm	Glenn Innes, NSW	11.5%	100	\$89.10	1-May-18
<b>Next Gen Auction</b>					
Hornsedale 3 wind farm	Port Augusta, SA	13.6%	109	\$73.00 (\$78.00*)	01-Oct-19
Crookwell 2 wind farm	Capital Region	10.0%	91	\$86.60 (\$90.40*)	17-Sep-18

\* Price includes Energy Storage Contribution (ESC)—contributing to the \$25 Million Next Generation Energy Storage Program

### Next Generation Energy Storage program

The program has been operating since April 2016 and is funded from \$25 million in industry funding secured through the 200MW Next Generation Renewables Auction (from the Crookwell 2 and Hornsdale Stage 3 wind farms).

The current subsidy is \$825 per kilowatt (kW) of Sustained Peak Output. For the average residential battery system, this equates to around a \$4000 rebate, bringing the total installed cost of a typical solar PV and battery system to around \$12,000 to \$16,000. The cost and rebate varies significantly between systems.

The subsidies are provided via eight battery installers who were selected through a competitive grants process. This ensures the best value for money for the Territory, and that batteries are only installed by skilled and accredited tradespeople. The process also favoured installers who committed to contributing to the local renewable energy industry.

### Large-scale Generation Certificate (LGC) surrender

The deeds signed with the proponents of all successful projects in the ACT's large-scale reverse auctions require them to transfer to the Territory the LGCs created by the generation for which they have received feed-in tariff payments.

It remains Government policy that the default position will be to voluntarily surrender the LGCs. However, the Government will consider the appropriate use of its LGCs on an annual basis given the ongoing uncertainty about Commonwealth Government guarantees on the additionality of such surrenders.

### Community solar

The Community Solar Scheme was a commitment in the 2012 ACT Parliamentary Agreement. In February 2014, The ACT Government approved the release of 1MW of capacity for the Scheme under the *Electricity Feed-in (Large-scale Renewable Energy Generation) Act 2011*.

After two requests for proposal periods, the most recent in 2014-15, SolarShare submitted a new proposal in May 2017. SolarShare has already conducted some fundraising for the project, reportedly securing \$2.89 million in local investor commitments for the project.

## ENVIRONMENT, PLANNING AND SUSTAINABLE DEVELOPMENT ASSEMBLY BRIEF

### ISSUE: Carbon Neutral Government Framework – Savings opportunity through accelerating energy efficiency in government operations

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#### Context

The ACT Government is leading by example through the Carbon Neutral Government (CNG) Framework in working to achieve carbon neutrality in its own operations by 2020.

#### Talking Points

- Endorsed in August 2012, the CNG Framework enables and coordinates a whole-of-government approach to achieving sustained emissions reductions and energy savings with the aim of achieving carbon neutrality in government operations in a cost-effective manner by 2020.
- Government emissions account for around 5% of the ACT's emissions profile. ACT Government emissions have reduced by an estimated 11% since 2012-13, even while service delivery has increased. This has been achieved through mitigation actions like large-scale energy efficiency upgrades and the transition to 100% renewable electricity by 2020.
- To become net carbon neutral means that any residual emissions will need to be fully offset by the generation or purchase of carbon credits/offsets, at a cost to Government of approximately \$1 – 2 million per year. The *Climate Strategy to a Net Zero Emissions Territory* discussion paper raises the social cost of carbon (SCC) as an alternative to offset the total future economic damage of emissions; it is estimated that this would cost the ACT Government approximately \$4.55 million in 2020 alone.
- From July 2012 the ACT Government redirected the majority of its GreenPower budget to support energy efficiency projects through the CNG Fund, which is administered by EPSDD. GreenPower currently makes up 5% of the ACT Government's electricity purchases, and this proportion will be maintained until the 2018-19 financial year.
- The CNG Fund provides interest-free loans to agencies to support approved energy efficiency projects. Energy savings are used to repay the loan, replenishing the CNG Fund and making funds available for new projects. The current balance of the Fund is approximately \$4.8 million. To access the Fund, ACT Government agencies are required to have a current Resource Management Plan and a business plan outlining how the loan will be repaid.
- 26 ACT Government projects have been supported under the CNG Fund since 2010, to a value of approximately \$14.5 million. A diverse range of projects have been supported including: lighting; heating, ventilation and cooling (HVAC) upgrades; smart building management systems; and an off grid solar photovoltaic system connected to battery storage. These projects make ongoing annual cost and energy savings from the date of their implementation. Savings from these 26 projects are estimated to be around \$2 million per year. Measurement and verification of projects is ongoing.
- A CNG Fund grant stream was established in 2017, for innovative and new types of project. The grant stream allows for a more flexible approach, funding potential projects that do not

meet eligibility requirements for a loan but still present an opportunity for the ACT Government to encourage innovation and demonstrate leadership in reducing emissions to meet its 2020 carbon neutrality target.

- The Enterprise Sustainability Platform (ESP), fully implemented in 2014, is an essential component of the ACT Government working towards carbon neutrality in its operations. It provides Directorates and other agencies with comprehensive information on energy and water consumption, cost and greenhouse gas emissions data required for reporting and resource management planning.
- The 2010-11 and 2011-12 ACT Budgets provided \$407,000 and \$780,000 respectively for the establishment and ongoing operation of the ESP project over four years. This period concluded at the end of June 2016. The cost of the ESP is currently covered by contributions from existing ACT Government agency budgets and this is continued in forward estimates. A new ESP contract commenced on 20 October 2017, for a 2+2 year term.
- ESP data underpins the tracking of formal energy reduction targets, derived from carbon budgets, which set an annual cap on energy consumption for an agency. Since July 2016 energy targets have been used as an accountability indicator in Director-General performance agreements.
- The CNG Framework was reviewed during 2016-17. The review evaluated progress on implementation strategies and actions under the Framework, considers existing measures and successes to date, and recommends actions required to ensure that the ACT Government achieves net zero emissions by 2020, and further reduces and maintains net zero emissions beyond 2020. The final review report will be provided to the CNG Implementation Committee, the ACTPS Strategic Board, the Minister for Climate Change and Sustainability and the Chief Minister.
- The ACT Government is currently undertaking a trial of electric bikes for staff work travel to encourage active travel, support the Healthy Weight Initiative, and reduce transport costs and greenhouse gas emissions.
- The electric bikes are currently available for use by staff of EPSDD, TCCS, EDU, CMTEDD and HD, at locations including Dickson, Civic and Woden. Over 200 individuals have been inducted in the use of the electric bikes, and the fleet has now travelled more than 4,500 kilometres. The electric bike trial is being evaluated by EPSDD Corporate.

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## Background

A CNG Implementation Committee, consisting of a representative from each Directorate, was established in 2013 to coordinate efforts across Government and oversee implementation of the CNG Framework. The Committee reports annual progress to the ACTPS Strategic Board.

To facilitate the transition to carbon neutral government operations, the CNG Program team in EPSDD administers the CNG Fund, maintains the ESP database of energy, fuel and water consumption, costs and emissions, and provides training and assistance to agencies in reducing and reporting energy and emissions. Three energy project officers in ACT Property Group also provide a whole of Government energy efficiency service.

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# Minister for Climate Change and Sustainability

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March 2018

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**ISSUE:       HYDROGEN DEMONSTRATION (INCLUDING VEHICLES)****Talking points:**

- The ACT is partnering with the ANU's Energy Change Institute and industry partners including EvoEnergy and Hyundai on a hydrogen demonstration project which includes transport, electricity grid support and gas grid injection.
- The project will build capability in the ACT's high value-added renewable energy services ecosystem and positions us to benefit from regional developments, including South Australia's complementary efforts to build a hydrogen export industry.
- The project is supported by around \$8 million in industry investment and is currently expected to commence operating in mid-2019. The exact start date is subject to a number of variables including production timeframes for the 20 Hyundai hydrogen cars, which are yet to enter production.

**Key Information**

EPSDD is currently working with industry and across government to develop a hydrogen technology demonstration initiative as an outcome of the ACT's renewable electricity reverse auctions. The ACT's hydrogen demonstration project is supported by around \$8 million in local investment commitments [REDACTED].

**Background Information – may not be suitable for public disclosure**

- [REDACTED]
- [REDACTED]
- However, TCCS has recently indicated its preference is to electrify its fleet using battery electric vehicles rather than hydrogen fuel cell technology. Accordingly, EPSDD is working with the wind farms, industry and research stakeholders to right-size and de-risk the project, which will soon enter a detailed scoping phase.
- Concurrently, the ACT has entered into a strategic partnership with South Australia on clean energy advancement. The partnership will be implemented through separate 'project agreements'. The intent is for the first project agreement to be for collaboration on hydrogen projects in Adelaide and Canberra.



**ISSUE: PROVIDING CHOICE in GAS NETWORK PROVISION (INCLUDING GINNINDERRY)**

**Talking points:**

- The Territory Plan requires natural gas distribution infrastructure to be installed in all new estate developments, along with other services like water and electricity.
- The ACT Government has considered a request from the developers of the Ginninderry estate in West Belconnen to remove the mandatory requirement to install natural gas in support of its plans for a low-carbon electricity ‘microgrid’ for the development.
- Rather than pursue full deregulation, the ACT Government has agreed to support a pilot demonstration project of an all-electric area in Stage 1 of the Ginninderry precinct. The pilot project will include the first 350 residences where gas will not be connected.
- The pilot project will be jointly managed by Evoenergy, the ACT’s electricity network operator, the Ginninderry Joint Venture, the ACT Government and Reposit Power. The results of the pilot will inform government consideration of future energy infrastructure and planning policies.
- Current estimates suggest that by 2020, over 15 per cent of ACT greenhouse gas emissions will come from natural gas related emissions, predominantly associated with residential and commercial space and water heating applications. Consistent with our greenhouse gas emissions reduction targets and our commitment to net zero emissions by 2050 at the latest, it is prudent that the Government examines how we might reduce all emissions sources, including from natural gas use.
- Infrastructure decisions made in coming years will shape our future emissions profile.
- While the growth in natural gas consumption in the Territory has moderated in recent years, gas is expected to play a role for some time to come, especially in the national electricity generation sector, supporting the transition to renewables.

- Observed increases in retail gas prices, and the Territory's renewable electricity target, are now challenging the long held assumption that gas is a cheaper and cleaner alternative to electricity for particular residential uses.
- Innovations in household cooking (induction stoves), space heating and hot water appliances (heat pumps) now provide households with more choice of how to meet their heating and cooking needs. Winding back government mandates and promoting greater consumer choice will promote technology and commercial innovation and lower costs for all energy users.

### Key Information

The matter of gas connection to new suburbs has recently come to public attention following the proposal by the Riverview Group to not include gas reticulation as part of the new Ginninderry estate development at West Belconnen.

### Background Information – may not be suitable for public disclosure

#### Requirements for gas in new estates

- The provision of natural gas reticulation infrastructure to new estate developments is established via a mandatory rule in the Estate Development Code. Rule 43 of the Estate Development Code requires the provision of gas distribution infrastructure, as well as other essential services such as electricity and water, in new estate developments.
- The Estate Development Code is part of the Territory Plan, a statutory document legislated through the *Planning and Development Act 2007*. Any decision to not require the mandatory roll out of gas distribution infrastructure to new estate developments would require a variation to the Territory Plan.

#### Infrastructure costs

- ACT energy consumers, through regulatory determinations, bear the cost of energy infrastructure investment through their energy bills. It is therefore important that policy makers have sufficient information and evidence to enable appropriate scrutiny of future investment decisions for energy infrastructure.
- Lower demand for gas over time, for economic reasons, could create a scenario where energy consumers were required to carry the cost of maintaining underutilised infrastructure, rather than the risk being borne by the gas network business that made the investment. This is a matter that could also be considered by the COAG Energy Council which oversees the way in which gas network expansion and gas network pricing for consumers is approved.

**ISSUE: ACT'S CLIMATE STRATEGY DISCUSSION PAPER**

**Talking points:**

- A discussion paper on the ACT's climate strategy to a net zero emissions territory is open for public comment.
- The consultation period commenced on 11 December 2017 and will remain open until 9 April 2018.
- Input for the development of the paper includes:
  - Community ideas from two roundtables held in 2017
  - Advice from ACT's Climate Change Council
  - Greenhouse gas emissions modelling of policy options and pathways.
- Economic modelling that costs the impacts on the economy to produce a marginal cost of abatement curve was released 1 March 2018.
- The discussion paper seeks community views on Council's proposal to set a new target for achieving net zero emissions by 2045 (in place of the current 2050 target) and setting interim emission reduction targets for 2025, 2030 and 2040.
- Key focus areas for reducing emissions and increasing resilience to climate change are energy, transport, waste and land use.
- To achieve the next set of emission reduction targets we will need to reduce emissions fairly rapidly, especially from how we travel around the city.
- It is also important to consider the ongoing efficiency of how we use electricity, and how we build our homes, offices and public buildings to be low carbon and climate resilient.
- The Government is seeking feedback on the proposed targets and the approach to selecting policies and actions to reduce emissions and build resilience in the Territory.
- Comments can be made through the Yoursay page.
- Schedule 1 - 1.6

## Key Information

In 2017 the Climate Change policy team commenced the development of the next climate change strategy and action plan for the ACT. The first step in the process was to release a discussion paper for public consultation which was cleared by Cabinet on 6 December 2017.

## Background Information – may not be suitable for public disclosure

ACT's current climate change strategy, AP2, sets a pathway to achieving our 2020 targets. The new strategy will build on this work to set a pathway to 2025 so that the ACT can continue to lead on climate action. A new strategy and action plan needs to be in place by 2019.

EPSSD commenced work on a new strategy in December 2016, meeting with the ACT's Climate Change Council to seek initial advice on emissions modelling. Two community roundtables were held in February and March 2017, and targeted stakeholder consultations were held during 2017 with subject matter experts to gather innovative ideas and topics for further investigation.

**ISSUE: NATIONAL ENERGY POLICY DEVELOPMENTS**

**Talking points:**

The National Energy Guarantee (NEG)

- The ACT Government supports the implementation of a national energy policy that ensures energy supply is affordable, reliable and helps meet Australia's Paris Agreement climate change commitments.
- The NEG would create new obligations on electricity retailers to purchase set amounts of electricity generation to meet any reliability shortfall that may be identified, and set amounts of renewable or low emissions energy generation to meet an emissions reduction obligation.
- The NEG would be administered by the Australian Energy Regulator, although other market bodies may also have roles.
- The Energy Security Board (ESB) has emphasised that this is a plan in its infancy and requires substantial modelling, and has begun a program of stakeholder engagement that is expected to take at least 12 months.
- While the ACT Government has not yet decided whether to endorse the NEG, we are currently engaging with the ESB to help improve its design to ensure it delivers outcomes that are in the interest of all Australian electricity consumers.
- The information available to date does not mention any emissions trajectory past 2030. It also only considers electricity sector emissions reductions targets on a pro-rata basis. This would result in other sectors of the economy such as transport and land use having to account for a larger share of the remaining abatement task.
- Major questions affecting the ACT still need to be answered, such as:
  - the absence of a net zero emissions reduction trajectory to 2050 in line with the Paris Climate Agreement;

- any impacts on competition and consumer choice in electricity markets; and
- the implications regarding the additionality or otherwise of state and territory renewable energy and emissions reduction policies.
- Questions remain over the modelling around affordability outcomes, with doubts as to whether claimed costs savings would eventuate. Further concerns have been raised about the potential effect on the ACT's renewable electricity contracts.
- The NEG policy proposal was put forward to the COAG Energy Council in late November 2017. Despite the misgivings of the ACT and South Australian governments, the COAG Energy Council voted via majority to task the ESB to undertake further design work on the NEG. It is important to note that a decision has not yet been made to implement a NEG policy.
- COAG Energy Ministers are likely to consider this question in mid-2018 once the policy has been further developed.

### Changing consumer preferences

- Energy consumers are gaining greater choice and control including through adopting rooftop solar and energy storage and through non-conventional 'microgrid' approaches to electricity network development.
- The COAG Energy Council has committed to removing barriers to new technologies. Consumer groups are also being consulted on how to best balance consumer protections and the need to enable market innovation.

### Changes in the ACT

- Over 18,000 Canberra households and businesses have now installed a rooftop solar power system, totalling approximately 66 megawatts in installed capacity. Coupled with our Canberra-based large scale solar farms, over 100 megawatts of solar generating capacity is now operating in the Territory.
- In the ACT we are continuing to lead the way for new innovations in the energy sector. For example, Canberra businesses Reposit Power and

Evoenergy launched a Canberra-based trial in late 2017 of the world's largest residential virtual power plant.

- This innovative project rewards participating households for exporting their stored electricity that has been generated from a rooftop solar system. The virtual power station coordinates batteries distributed across the city and can help manage peak electricity demand and improve grid security.
- It is projects such as this that have cemented Canberra as a nation leading hub for renewable energy research and development, and are at the forefront of an energy consumer transformation.

### Key Information

Australian energy markets are experiencing a major period of change driven by a range of government reforms and shifts in technology and consumer preferences.

On 17 October 2017, the Commonwealth Government, on advice from the newly formed Energy Security Board (ESB), announced its policy for a National Energy Guarantee (NEG) scheme.

## **Background Information – may not be suitable for public disclosure**

### National Energy Guarantee (NEG)

The prospective NEG scheme was announced by the Commonwealth Environment and Energy Minister Josh Frydenberg MP on 17 October 2017. State and territory governments were not been consulted on the detail of the Commonwealth’s NEG announcement, which comprised an 8-page letter from the Energy Security Board (ESB). The ESB released a detailed consultation paper on 15 February 2018 seeking stakeholder feedback and submissions on the draft NEG design elements.

The NEG would be enacted via changes to national energy laws. Any change to national energy laws require the unanimous agreement of the COAG Energy Council, comprised of Commonwealth, state and territory governments.

### ACT energy policies and programs

The ACT’s Sustainable Energy Policy 2011-2020 provides an integrated framework with four targeted outcomes:

- Reliable and affordable energy
- Smarter use of energy (energy efficiency)
- Cleaner energy
- Growth in the clean economy.

In addition to ACT energy policies and programs, all jurisdictional Energy Ministers participate in the COAG Energy Council (the Council) which provides policy leadership of the National Electricity Market (NEM) under the Australian Energy Market Agreement. The NEM is operated by the Australian Energy Market Operator (AEMO), regulated by the Australian Energy Regulator (AER) and rules are made by the Australian Energy Market Commission (AEMC).



**ISSUE:       WHAT IS *POWER OF CHOICE* AND WHAT WILL IT MEAN TO EVERYDAY CANBERRANS?****Talking points:**

- Power of Choice is a national package of reforms to the National Electricity Market (NEM). These reforms will provide consumers around Australia, including the ACT, with more choice and control over how they manage their electricity expenditure.
- One of the main reasons electricity bills have increased rapidly over the past decade is due to massive investment in the electricity network (or ‘poles and wires’). The Power of Choice reforms will encourage consumers to reduce their peak demand thereby driving down the cost of grid operation into the future.
- Australia’s Power of Choice reforms are an important part of building the electricity grid of the future and taking advantage of the rapid transformation that is underway in the energy sector.
- The main change that started on 1 December 2017 introduced smart meters and made the provision of smart meters a competitively offered service to consumers. Electricity retailers are now responsible for installing and reading smart meters instead of monopoly network businesses.
- A smart meter is a digital electricity meter that records how much electricity is used and when. A smart meter can be read remotely, and the process of changing from one retailer to another will be able to occur more quickly. A smart meter can provide customers with more useful information about how they use electricity. This in turn can help people identify ways to better manage their electricity bills.
- From 1 December 2017, any newly built residence or business will require a smart meter. When an existing electricity meter breaks down or otherwise needs replacing, it will be replaced with a smart meter.
- The Power of Choice changes will not directly affect Canberrans if their existing electricity meter is in working order.
- Canberrans can also choose to replace their existing meter with a smart meter at any time. Customers should talk to their preferred retailer about what options are available.

- Electricity customers already pay for new electricity meters and this will not change after 1 December 2017. The change here is that electricity retailers will determine the cost of smart meters. Some retailers have already announced they will provide free smart meters as part of their new tariff packages.
- As with choosing any other product, Canberrans should research the deals on offer and choose the best deal for their circumstances. Electricity retailers make most of their profits from their loyal customers. The Energy Made Easy website operated by the Australian Energy Regulator provides an independent price comparison service that can help customers find the best deal.
- For customers who can reduce their electricity use during peak times by spreading out the use of appliances to off-peak periods, a retail demand or time-of-use tariff may be beneficial.
- From 1 December 2017, for customers with smart meters, the default tariff that Evoenergy charges the electricity retailer will incorporate a 'demand tariff'. These tariffs better reflect the cost of generating and transporting electricity at peak times. How electricity retailers pass this cost to customers through various plans will be choice for them to make, informed by their customer's preferences.

### *Who to contact:*

- In case of a power outage or other electricity supply issues, faults or emergencies, customers should call Evoenergy. For any other matters around meters or billing, customers should call their electricity retailer.

### *Tenant Landlord Scenarios*

- In rental situations, if an electricity meter fails, the tenant would contact their preferred retailer to have a smart meter installed. The lessor cannot block this work, and will need to meet the cost of any extra electrical work needed to retain a physical supply. This is because the lessor has an obligation under the *Residential Tenancies Act 1997* to ensure physical supply of electricity to a property.
- If a tenant wished to upgrade a working meter to a smart meter, lessor approval would be required. This is similar to seeking approval for any other improvement to the rental property.

**Key Information**

'Power of Choice' reforms to the National Electricity Market (NEM) will provide consumers with more choice and control over how they manage their electricity expenditure while helping to drive down costs for all electricity users. The main reforms that started on 1 December 2017 introduced smart meters and made metering a competitive service.

**Background Information – may not be suitable for public disclosure**

The Power of Choice reforms apply to small electricity customers (consuming less than 100MWh per year). These are mainly households, and some small businesses and organisations. The reforms were initiated following the 2012 Australian Energy Market Commission (AEMC) Power of Choice Review, which was agreed by the Council of Australian Governments (COAG) Energy Council.

Customers who find they are required to obtain a smart meter and are unable to find a better electricity deal or move their electricity load to take advantage of demand tariffs, may see a rise in costs. A range of programs and concessions are can assist people having difficulty managing their energy use or paying their energy bills. Actsmart programs are an example of this.

The person that attends a premises and installs a smart meter must be a licensed electrician and must be endorsed to undertake smart meter work in the ACT.

Smart meters are manufactured to Australian Standards and must comply with the electromagnetic exposure limits developed by the Australian Radiation Protection and Nuclear Safety Agency (the same as all other wireless devices).

Information collected by a customer's smart meter is sent to electricity market 'participants' including the relevant electricity retailer and distributor. Electricity market participants are required to keep customer information confidential under the National Electricity Law. The Australian Energy Market Operator requires metering companies to demonstrate that they can keep their metering systems secure. The Privacy Act also applies to electricity companies.

## Portfolio/s Climate Change & Sustainability

### **ISSUE: ACT CLIMATE CHANGE POLICY – COSTS TO COMMUNITY AND CONSUMERS**

#### **Talking points:**

- ACT Government climate change mitigation policies are expected to contribute around \$200 to the typical annual electricity bill of a four person household in the ACT in 2017-18. Despite these costs, the ACT continues to have among the cheapest electricity prices in Australia.
- These costs are offset by an annual saving of around \$250 on average for the over 70,000 households and businesses that have participated in the Government's Energy Efficiency Improvement Scheme.

#### Cost of the Feed-in Tariff (FiT) schemes

- The ACT's FiT schemes which support investment in clean renewable energy form the largest share of these costs.
- Together, the ACT's large and small FiT schemes are expected to contribute approximately \$168 to the annual electricity bill of a typical four person Canberra household in 2017-18.
- These FiT schemes are a key part of the ACT's 100 per cent by 2020 renewable electricity target. The ACT remains on track to achieve its 100 per cent by 2020 renewable electricity target. This is one of the most ambitious targets globally.
- The Government has been very open about the costs of moving to increased supply of renewable electricity, and remains confident that these costs will be less than originally modelled in 2012.

#### Cost of the Energy Efficiency Improvement Scheme (EEIS)

- The Energy Efficiency Improvement Scheme is expected to contribute approximately \$31 to the annual electricity bill of a typical four person Canberra household in 2017-18. This is much lower than the expected annual average saving in 2020 of around \$250 for participating households and businesses.

**Key Information**

The *Climate Change and Greenhouse Gas Reduction Act 2010*, commits the Territory to reducing greenhouse gas emissions to 40 per cent below 1990 levels by 2020. To achieve these reductions, the ACT Government set a target to secure 100 per cent renewable electricity by 2020. The switch to renewable electricity is projected to account for over 90 per cent of emission reductions by 2020. The cost of these policies is passed on to consumers via electricity bills.

*Note: The annual consumption of a typical four person household in the ACT is 7.441 megawatt hours (Source: Australian Energy Regulator), which has been used to calculate the cost of these policies. This is different from the Electricity and Gas Price Increases question time brief, which uses 8 megawatt hours to help achieve consistency with the ICRC's report and media release, noting this overestimates costs.*

**Background Information – may not be suitable for public disclosure****Opportunities to mitigate costs**

There are many ways in which the ACT Government is supporting households and businesses to manage their energy usage and costs.

- Ask for advice through the Actsmart Sustainable Home Advice line. Call 1300 141 777 or email [ActsmartAdvice@act.gov.au](mailto:ActsmartAdvice@act.gov.au).
- Get an energy assessment, including education and draught proofing through the Actsmart Home Energy Efficiency Program run through St Vincent de Paul. Contact St Vincent de Paul on 6234 7408 or [energyefficiency@svdp.org.au](mailto:energyefficiency@svdp.org.au).
- Attend a workshop on heating and cooling homes efficiently, do it yourself draught proofing and more. See [actsmart.act.gov.au/news-and-events](http://actsmart.act.gov.au/news-and-events).
- Borrow an energy kit from public libraries across the ACT to check your home. The kit has everything you need to assess your current energy and water usage. For more information, call Access Canberra on 13 22 81.
- Get an energy concession through the Utilities Concession Scheme for low income households. Eligible households include Centrelink Pensioner Concession Card holders, Low Income Health Care Card holders, Veteran's Affairs Pensioner Concession Card holders or Gold Card holders. For more information, contact your energy provider. Once people know what they need to do to save energy, the following options are available through government programs.
- The Actsmart Solar for Low Income program provides a subsidy of up to 60% off the total cost of a rooftop solar system, as well as an interest free loan to pay off the remaining costs. Contact Actsmart on 13 22 81 or [actsmart@act.gov.au](mailto:actsmart@act.gov.au).
- Low income households can receive thousands off the purchase price to upgrade old, inefficient heating systems to a high efficiency fixture through the Energy Efficiency improvement Scheme (EEIS). For more information please contact ActewAGL Energy Shop on 62800994 or Climate Master on 62281126.
- The *No Interest Loans Scheme*, can provide \$300 for energy efficient refrigerators, \$200 for freezers, and \$500 for split systems as well as \$200 for a limited number of washing machines. To find out more, call Care Financial Services on 02 6257 1788 or The Salvation Army on 0437 723 863.

- A program is underway to replace 200 old, inefficient heaters in public housing with high efficiency systems is underway. This aims to significantly reduce energy costs for public housing tenants. This program will be delivered to pre-selected Housing ACT premises as part of a trial. For more information, please contact Housing ACT on 02 6207 9183.
- Businesses can save up to 60% on lighting electricity bills through energy efficient lighting upgrades. Free or substantially discounted lighting upgrades are available through the ActewAGL Big Business Light Switch.
- Rebates of up to \$5,000 are available through the Business Energy and Water Program to eligible ACT businesses wanting to upgrade to more water-efficient and energy-efficient technologies. Call 13 22 81 or email [businessenergy@act.gov.au](mailto:businessenergy@act.gov.au)

People who are having trouble paying bills can access financial support:

- Access an annual rebate of up to \$604 is available to help eligible customers with utility bills, including water, sewage, gas and electricity. This utilities concession is for both home owners and renters who hold eligible concession cards.
- ActewAGL's Energy Support Fund provides direct support through a system of vouchers to assist vulnerable customers with their energy bills. The vouchers are distributed by community groups that provide emergency relief services. The fund includes contributions of \$250,000 by both the ACT Government and ActewAGL. For more information, please contact ActewAGL 1300 136 008.

**ISSUE: ELECTRICITY AND GAS PRICES**

**Talking points:**

Electricity price increase

- The ICRC's final decision provided for an 18.95 per cent increase in ActewAGL Retail's regulated retail electricity tariffs from 1 July 2017.
- This is a significant increase which means that an annual electricity bill for a typical four person household (consuming 8,000 kWh) will increase by approximately \$333 in 2017-18. The annual electricity bill for such a household will be approximately \$2,089 (including GST) in 2017-18.
- Unfortunately, this increase comes at a time when gas prices are also rising significantly. However, despite these increases, it is also important to note ACT consumers continue to have access to some of the lowest retail electricity prices in Australia.
- Rising wholesale electricity costs are the primary contributor towards this increase. The recent shutdown of the Hazelwood power station in Victoria had the effect of reducing supply, causing wholesale prices to rise across the National Electricity Market.
- The price increases are a direct outcome of the failure of the Federal Government to provide investor confidence in the sector meaning new, modern, low carbon generators are not being built as ageing coal generators retire.
- The ACT community isn't the only one feeling this impact. Significant increases in electricity prices similar to the ACT have also been observed in other parts of Australia.

The cost of the ACT's renewable energy policies

- Approximately 10 per cent of the 2017-18 regulated retail electricity price can be attributed to the ACT's Feed-in Tariff schemes. ACT electricity consumers have been paying this gradual contribution towards the 100 per cent by 2020 renewable electricity target.
- The Government has been very open about the costs of moving to 100 per cent renewable electricity, and remains confident that these costs will be less than originally modelled in 2012.

- The contract mechanism the Government has used to secure large-scale renewable electricity generators is helping offset the impact of rising wholesale costs.
- The ACT pays the difference between the feed-in tariff price and the wholesale market price. If wholesale prices rise, then ACT consumers pay a smaller feed-in tariff support payment.
- The ACT is on-track to achieve its 100 per cent by 2020 renewable electricity target, which is one of the most ambitious targets globally. It continues to have broad community support, despite the modest associated cost.

### Action to reduce electricity price pressures

- The ACT Government is helping households and businesses to manage their energy costs.
- Eligible households in the ACT can apply for an annual rebate of up to \$604 to assist with utility bills, including water, gas and electricity.
- We provide comprehensive information, tools and programs to help households and businesses manage their energy costs and usage. Households and businesses can visit [www.actsmart.gov.au](http://www.actsmart.gov.au) or call 13 22 81 for free information and advice on the energy savings opportunities available.
- The Government has supported the establishment of an Energy Consumer Advocate, to provide the community with a voice in decision making processes like the ICRC retail electricity price decision process.
- The ACT Government will continue to maintain price regulation on retail electricity prices. Without this, we would have no basis to scrutinise and keep a lid on electricity prices.
- The ACT Government is also investing in energy efficiency, which has never been more cost effective for consumers. The Energy Efficiency Improvement Scheme is saving participating households around \$5 per week on average, and it has a particular focus on energy savings in low income priority households.
- The ACT Government has made a contribution of \$250,000 to the ActewAGL Energy Support Fund, thereby ensuring up to \$500,000 will be available to help consumers struggling with their energy bills.



- This fund is providing vouchers to community groups that provide emergency relief services, for distribution to vulnerable Canberrans to help with their energy bills.
- ActewAGL has established a dedicated 'Bill Help hotline', which provides a central point of contact for customers to access the range of support options and information on rebates, concessions and energy saving advice.
- It has also established a solar grants program for eligible community organisations, which will help cut energy bills for groups that provide vital community services.
- As at 31 January 2018, approximately 1120 vouchers have been issued. Care Financial Counselling Service has been the largest issuer of vouchers to date.

### Rising gas prices

- ActewAGL Retail recently announced that residential gas prices will increase by 17.3 per cent in 2017-18. Unlike electricity prices, gas prices are not regulated in the ACT.
- This will mean that a typical household consuming 43 gigajoules (GJ) of gas from ActewAGL Retail will see their annual gas bill rise by approximately \$250.
- The increase in gas prices is driven by rising wholesale costs. These costs have almost doubled over the past year driven by rising gas exports from the east coast of Australia.
- Using the threat of gas export controls, the Commonwealth Government has secured agreement from major gas producers to ensure sufficient gas supply is made available to domestic consumers to avoid the risk of a gas supply shortfall in 2018.
- Prices are also being exacerbated by a lack of competition between suppliers and pipeline operators. The COAG Energy Council has initiated a range of reforms to ensure efficient prices flow through to customers.

## **Key Information**

The Independent Competition and Regulatory Commission (ICRC) released its retail electricity pricing decision for 2017-18 on 7 June 2017. This decision applies to regulated retail electricity tariffs offered by ActewAGL Retail from 1 July 2017. ActewAGL Retail has also announced an increase in residential gas prices of 17.3 per cent in 2017-18.

## **Background Information – may not be suitable for public disclosure**

The ICRC is the ACT's independent price regulator for retail electricity prices. Gas prices in the ACT have not been regulated since 2004.

**ISSUE: CSIRO CANBERRA URBAN HEAT REPORT AND LIVING  
INFRASTRUCTURE INFORMATION PAPER****Talking points:**

- The four main impacts from climate change in our region are heatwaves, storms with flash flooding, droughts and bushfires. Understanding these extremes better will enable actions to be taken to reduce the Territory's vulnerability to risks.
- The CSIRO was engaged to investigate Canberra city locations where heatwave conditions may be exacerbated due to poor area design that trap heat and/or lack of cooling features such as trees and green spaces. Their report was completed in December 2017 and it identifies where and why Canberra has urban heat problems.
- Increasing the shade from trees is a cost effective way to cool the city, and together with urban desing that helps retain some of the stormwater to support greenery before it gets into the stormwater drain will both help reduce flash flooding and help drought proof the landscape.
- The vegetation, water and healthy soils of our urban forest, lakes, waterways and suburban gardens, is our living infrastructure, the legacy of our first 100 years. As the city grows and changes in our second century, incorporating living infrastructure into all parts of the city, is very important to make our city more resilient to climate impacts.
- Continuing investment in living infrastructure is essential for a liveable city. Options to further develop our living infrastructure will form part of the new climate change strategy. Canberrans are encouraged to take part in the development of the strategy, which is open for consultation until 9 April 2018.

**Key Information**

On 28 February two documents 'Mapping surface urban heat in Canberra' a report by CSIRO and 'Living Infrastructure Information Paper' by the ACT Government were released, as background information as part of community engagement on the ACT's Climate Strategy to a Net Zero Emissions Territory (new climate strategy).

The *ACT Climate Change Adaptation Strategy – Living With a Warming Climate* (the Adaptation Strategy) was released on 8 August 2016. Action #15 is developing a Living Infrastructure Plan by end 2018.

**ISSUE: NET ZERO EMISSIONS ECONOMIC MODELLING**

**Talking points:**

- Economic modelling was commissioned to provide initial costing of measures to achieve the pathway to net zero emissions by 2050 at the latest.
- The Climate Strategy Economic Modelling Report was released on 1 March 2018 and is available on the Yoursay website.
- The report focuses on emissions reductions and costings to 2030 only, to ensure the rigor of the information especially regarding prices for the energy sector.
- It provides two types of costing for consideration:
  - The Private cost of action – i.e. the cost to the entity pursuing the measure; and
  - The Welfare cost – i.e. the economy wide cost, quantified through a CGE analysis assessing all costs and benefits across the territory
- Costs are expressed in dollars per tonne of carbon abatement. Totals are given to achieve the abatement required for the 2030 target range of 65-75 percent below 1990 levels.
- Modelling of emissions reduction measures indicate potential for sufficient abatement to meet the 65 percent target at an average welfare cost of \$32 per tonne.
- However the welfare cost of individual measures required ranges from - \$45 per tonne (a net benefit/saving) for ACT Government investment in electric vehicles to \$626 per tonne for sequestration from the urban forest in 2030.
- Modelled measures included supporting electric vehicle charging infrastructure, replacement of gas heaters with electric or heat pump, building standard changes, retrofits, and increasing public transport use.
- The 75% target could not be reached by the modelled abatement options alone. To reach the 75 percent target costs an average of \$126 per tonne if including the more costly option of building retrofits first, then meeting the balance with land based sequestration.

- Applying a social cost of carbon to the measures modelled reduces each measure by \$74 per tonne of abatement. This makes most measures cost neutral or cost saving when considering the global impact of carbon dioxide.
- Abatement costs are important but should not be considered the sole criterion for measure selection. Some measures have high abatement costs but potentially significant co-benefits and adaptation benefits.
- It may be possible to make the economy wide cost of action to reduce emissions cost neutral through avoided costs achieved by co-benefits of actions. These include avoided health costs, or less strain on the electricity network.
- However, it is difficult to cost climate adaptation and other co-benefits of actions. Therefore it is recommended to develop methods so these can be quantified and assessed.
- Some actions have both mitigation and adaptation benefits – such as tree planting to reduce urban heat island effects, which also sequesters carbon. Benefits resulting from mitigation measures that happen to improve community capacity and resilience are defined as co-benefits.
- This information will be used in the assessment of policy options to be progressed further in the development of a draft climate strategy.

**Key Information**

- Energetics with Cadence Economics commenced the modelling to November 2017, and completed it by 24<sup>th</sup> February 2018.
- The 65% emissions reduction target set by the ACT Climate Change Council can be met at an average economy wide cost of \$32 per tonne by 2030, or \$5.8 million.
- It is important for economy-wide abatement costings to account for adaptation and co-benefits such as health improvements, presenteeism, insurance savings, water and electricity network efficiencies. The true cost of abatement is therefore often able to be lower and could be made net neutral.
- Recommendations and key findings from the Report include:
  - Priority areas for future research on costing health benefits, industry learning rates especially for building efficiency, and impacts of building efficiency on the electricity network.
  - Highest priority of policy development should be on facilitation of electric vehicle uptake including e-buses.

- The further development of ACT's transport strategy to have targets and ambitions well beyond the current Transport for Canberra.
- The modelling was completed on best available data, and is based on the technical emissions modelling completed for the Climate Strategy Discussion Paper.
- To ensure number are rigorous, only those options with substantial costing information were modelled, based on historic and professionally projected costs.

## **Background Information – may not be suitable for public disclosure**

- This report does not provide a detailed cost benefits analysis for government on particular policy actions. Progression of preferred measures based in this initial information would require further costing and detailed assessment through a regulatory impact statement.
- Some measures have low direct abatement costs but significant economic implications, and may therefore face challenges in translation to policy and implementation. For example, more stringent standards for building energy performance could have a number of flow-on impacts, depending on how they are implemented: on the cost of housing construction, which is a major economic driver, or on the location of housing construction, which could leak to neighbouring jurisdictions with lower standards.
- There was a significant lack of data regarding transport mode shift actions and costings. Therefore this report does not cost dramatic changes to the distribution of transport mode use across the Territory. Climate Change Policy are aware through the technical modelling that mode shift away from private vehicle use is a primary driver of emissions reductions without the need to invest in new technology.

Portfolio/s Climate Change & Sustainability

Choose a Portfolio.

**ISSUE: SOLAR FOR LOW INCOME PROGRAM**

**Talking points:**

- The Actsmart Solar for Low Income Program received budget funding of \$2 million over four years, officially launched by the former Minister for the Environment and Climate Change, Simon Corbell on 20 July 2016.
- Following policy and program development an open tender process was undertaken in August 2017. ActewAGL were the successful respondent, with a contract awarded in December 2017.
- The program was launched to the public on 19 December 2017 at the site of the first rooftop solar installation.
- There has been significant interest in the program with 170 householders registered. Of these, 120 participants have been referred to ActewAGL to commence round one, with the remaining added to the waiting list for round two (commencing in July 2018 at the latest).
- Eligibility for the first round is open to Australian Government Pensioner Concession card holders who own their home and do not already have rooftop solar.
- Most households will receive a partial subsidy of up to 60% (capped at \$3,000) for the supply and installation of a rooftop solar system.
- There will be a limited number of full subsidy installations (20 in the first year) which will be focussed on vulnerable households, including those on life support/essential medical equipment. Availability of the full subsidies is not being advertised to the public.

## Key Information

The Actsmart Solar for Low Income Program has received \$2 million in funding over four years in 2016/17 budget to provide greater support to eligible ACT households to invest in rooftop solar panels to help reduce their energy costs, and reduce greenhouse gas emissions.

## Background Information – may not be suitable for public disclosure

- While there has been a large uptake of residential solar energy within the ACT, low-income households without access to the initial capital to purchase and install equipment are often not able to take advantage of this technology. The Solar for Low Income Program has been designed to remove the cost barriers and enable uptake by some of the most vulnerable in the ACT community and therefore most affected by both energy price increases and weather extremes.
- This program will be delivered through a combination of a generous subsidy of up to 60% (capped at \$3,000) as well as the option for householders to access an interest free loan to pay off the remaining costs. The program has been designed so that a majority of households who take advantage of the interest free loan should be able to save more money off their electricity bill as a result of their new solar system compared to their loan repayments. It has been estimated that households will save approximately \$300-\$900 per year.



**ISSUE: COMMUNITY ZERO EMISSIONS GRANTS PROGRAM**

**Talking points:**

- The Community Zero Emissions Grants Program provides \$550,000 over four years to eligible community groups and individuals for innovative projects, initiatives and programs which will assist the ACT's transition to net zero emissions by 2050 at the latest.
- Up to \$25,000 (excluding GST) will be available to eligible individual applicants and up to \$50,000 (excluding GST) for joint applications.
- The program supports locally based, community driven projects which encourage real change in ACT communities.
- Applications for round one closed on Thursday 27 July 2017 and 19 applications were received.
- Unions ACT had applied and were successful in winning a grant, however have since withdrawn their application. Subsequently, Oz Harvest have been offered and accepted a grant.
- The six successful projects to receive funding for Round One are detailed below.
  - The Neighbourhood Effect received \$25,000 to develop a free, interactive smartphone app and website to encourage the use of sustainable lifestyle habits, products and initiatives.
  - Canberra Environment Centre received \$24,200 to purchase a solar powered composter to service the Acton community's composting needs.
  - Woden Community Service will receive \$23,000 to train young people to fix and build bicycles which will then be donated to disadvantaged members of the community.
  - SEE Change received \$22,160 to engage project home builders and developers to build more sustainably and promote living with a smaller environmental footprint.
  - Australian Dance Party received \$21,550 to change perceptions and behaviours through a dance, short film and community awareness campaign.
  - OZ Harvest received \$25,000 to expand their Food Rescue program, increasing their capacity to store and redistribute up to 60,000 kilograms of quality surplus food. This will contribute to

the diversion of food from landfill with an estimated reduction of approximately 120 tonnes of CO<sub>2</sub>-e.

- The evaluation panel was made up of four individuals:
  - Dr Penny Sackett, Council Deputy Chair, Climate Change Council
  - Stephen Bygrave, (previous) Executive Director, Climate Change and Sustainability, EPSDD
  - Emma Humphreys – Manager Low Income and Community Programs, EPSDD
  - Anna McGuire – Policy Officer, Climate Change, EPSDD
- A/g Director General EPSDD, Dave Peffer, was the delegate for Round One of the Program.
- The attached table has been updated to include the period 1 July 2017 to 19 January 2018.
- A desktop review of Round One has been conducted informing the development of Round Two.

### Key Information

The Community Zero Emissions Grants Program was announced on 25 May 2017 by Minister for Climate Change and Sustainability Shane Rattenbury. The grants meet a Government commitment to support the community's transition to net zero emissions by 2050 at the latest. On 1 November 2017 Minister Rattenbury announced the six projects which were successful in securing funding for Round One of the program.

### Background Information – may not be suitable for public disclosure

- The grants are delivered through annual targeted rounds. Up to \$150,000 was allocated for Round One in 2017/18 to support on-the-ground actions across the energy, buildings, transport, land use and waste sectors. Support was also available for projects that engage and educate the wider community about how they can reduce their own emissions footprint.
- The Community Zero Emissions Grants Program is designed to fund projects and activities that will:
  - assist the community transition to net zero emissions;
  - develop and implement innovative solutions across the community to reduce greenhouse gas emissions;
  - generate new knowledge or information to facilitate local solutions to transition to zero emissions; and
  - develop innovative solutions to engage the community on zero emissions.
- The Program supports Parliamentary Agreement Item 6.1 on the target of net zero emissions by 2050 at the latest

<b>Actsmart Household Programs - Community Zero Emissions Grants Program</b>			
<b>Program</b>	<b>Purpose</b>	<b>2016/17 Outputs</b>	<b>2017/18 Outputs (as at 19 January 2018)</b>
Community Zero Emissions Grants Program	<p>The Community Zero Emissions Grants Program is designed to fund projects and activities that will:</p> <ul style="list-style-type: none"> <li>• assist the community transition to net zero emissions</li> <li>• develop and implement innovative solutions across the community to reduce greenhouse gas emissions</li> <li>• generate new knowledge or information to facilitate local solutions to transition to zero emissions</li> <li>• develop innovative solutions to engage the community on zero emissions.</li> </ul>	<p>The Community Zero Emissions Grants Program was announced on 25 May 2017 by Minister for Climate Change and Sustainability Shane Rattenbury.</p>	<ul style="list-style-type: none"> <li>• 19 applications were received for the grant program.</li> <li>• 6 projects have been approved for funding for the first round of the Program.</li> <li>• Funding for the successful projects totals \$140, 695.</li> <li>• 5 projects have executed Deeds.</li> <li>• Unions ACT negotiated the Terms of the Deed with Territory. A decision from Unions ACT on the negotiated Terms is still pending.</li> </ul>

**ISSUE: EEIS PROGRAMS AND SERVICES SUPPORTING THE ACT COMMUNITY**

**Talking points:**

- The Energy Efficiency Improvement Scheme (EEIS) will operate until the end of 2020 with new activities for businesses and households being phased in.
- The 20 per cent Priority Household Target has been retained for 2018.
- EPSDD and CSD have commenced a new joint initiative to improve the energy efficiency of 200 ACT public houses. This initiative helps low income households reduce energy use, bills and emissions by replacing old, inefficient heaters with high efficiency systems, including more efficient electric heat pumps. This will significantly reduce energy costs for some of ACT's most vulnerable households and help them adapt to a changing climate.
- A new Regulation commenced on 1 January 2018 to expand the classes of priority households. Holders of an expanded range of concession cards, tenanted public houses and not-for profit community, disability and aged care housing all qualify as priority households. Referral agencies including the ACT Civil and Administrative Tribunal, Care Inc, St Vincent de Paul Society and the Salvation Army can also classify and refer people to ActewAGL, as priority householders.
- Targeted consultation is underway on a risk review towards codes of practice for proposed new insulation activities, including ceiling, underfloor and wall insulation. Activities to support heating, ventilation and air conditioning activities in businesses are also being developed.
- An independent review of the EEIS is underway to determine how well the EEIS is working, to what extent it has achieved its statutory objectives so far, whether it remains appropriate for the future and how it could be improved. Point Advisory are undertaking the review and stakeholders have contributed through workshops, focus groups, individual interviews, surveys and direct feedback.

- The EEIS is a key mechanism for delivering on the ACT's 40% emission reduction target by 2020 as it meets the strategic priority of helping households and businesses reduce emissions and electricity costs.
- Since the EEIS started in 2013, more than 70,000 households and businesses have participated in the Scheme, including more than 17,800 priority low income households.
- Over 1.2 million energy saving items have been installed to date under the EEIS, saving hundreds of thousands of tonnes of greenhouse gas emissions.
- Over 1,500 Canberra businesses received over 110,000 energy efficient lamps to date which can save up to 60% of business lighting energy bills. The items installed by the end of 2017 have the potential to save around \$55 million over ten years. Local businesses are expected to save around \$192 million in lifetime energy bills as a result of EEIS energy efficiency upgrades, from activities delivered from 2016 to 2020.
- Energy efficiency savings from the EEIS in 2020 are estimated to be \$3.20 per week on average across all ACT households, with participating households saving around \$5.00 per week.
- Over 50 Canberra suburbs have participation rates in the EEIS of 30% or higher.
- As a result of the current programs being undertaken by ActewAGL under the EEIS, it is estimated that over 30 fulltime equivalent staff and contractors are currently used to deliver energy efficiency programs, including local electricians and plumbers.
- ActewAGL is continuing to provide residents with a range of EEIS activities to help manage their energy consumption. These include ActewAGL's Fridge Buyback scheme and offering rebates to replace poor performing gas heaters with high efficiency heaters. EEIS activities that save gas reduce more greenhouse gas emissions than those that only target electricity savings. All EEIS activities are contributing to the ACT's goal of net zero emissions by 2050, at the latest.

**Key Information**

The Energy Efficiency Improvement Scheme (EEIS) requires electricity retailers to achieve energy savings in households and small-to-medium enterprises. The Scheme also provides targeted assistance to low income households through a 20% Priority Household Target.

## Background Information

- The Energy Efficiency Improvement Scheme (EEIS) was established under the *Energy Efficiency (Cost of Living) Improvement Act 2012* and began on 1 January 2013 and is currently legislated until December 2020.
- The Act sets a Territory-wide energy savings target and obligates ACT electricity retailers to meet an individual Retailer Energy Savings Obligation by undertaking activities in households or small-to-medium enterprises. Smaller Tier 2 retailers can achieve their obligation by paying an ‘Energy Savings Contribution’.
- Energy Australia was the only Tier 2 retailer which delivered activities during the 2017 compliance period. All other Tier 2 retailers opted to pay an ‘Energy Savings Contribution’ in lieu of undertaking activities to meet their 2017 compliance period obligations. Energy Savings Contributions offset the cost of administering the EEIS and fund complementary programs such as Actsmart Energy Programs and Solar for Low Income Households.

**ISSUE: SUSTAINABILITY PROGRAMS**

**Talking points:**

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- A new contract with Saint Vincent de Paul has been signed for the continued delivery of the Curtain Program for Low Income Households. Curtains installed through the program provide multiple benefits, including improved thermal comfort and reduced energy bills, as well as non-energy benefits such as an increased sense of security and dignity.
- In the last 12 months there has been an increase in the use of the Actsmart Sustainability Home Advice (ASHA) hotline by 300%, with householders seeking a range of energy advice and options.
- During February 2018, the Actsmart programs team engaged more than 2,000 members of the public through participation at the National Multicultural Festival and the Canberra Show. This gave the team the opportunity to promote programs and climate change/sustainability initiatives of Government.
- Funding for the energy related programs has been appropriated by Treasury from the Energy Efficiency Improvement Scheme (EEIS) – Tier 2 funding until June 2018. Funding for non-energy programs is received through budget appropriation until June 2018.
- These programs support policies including the Greenhouse Gas Targets legislation, the climate change strategy (AP2), the Sustainable Energy Policy, the ACT Water Strategy and the ACT Waste Management Strategy.
- The table attached provides details of Actsmart programs, their purpose and delivery mechanism and participation levels.
- The programs are regularly evaluated to ensure they remain relevant and do not overlap with other programs offered by industry or other government agencies. Programs are flexible and developed using evidence based project planning.
- The use of social media via Facebook and Twitter was introduced in May 2015 and has created new avenues for the community to access

information and engage on sustainability and climate change matters. Engagement has increased steadily through this cost effective engagement channel.

- The Actsmart Business team are working with the City Activation team to improve functionality in key CBD laneways through the Laneway Project. Implementing streamlined waste services will result in improved resource recovery, less truck trips within the laneways and cleaner, less cluttered and more aesthetically pleasing laneways for the public and for events. A development application for the building of a shared waste enclosure has been approved for both the Melbourne and Sydney buildings. Extensive engagement has been undertaken with the traders and owners of both of these buildings. TCCS has approached the team to develop a similar model as part of the upgrade works at the Kambah shops.
- Statistics in the table are updated quarterly. The attached table has been updated to include the period 1 July 2017 to 31 December 2017.
- Actsmart Schools has expanded the waste program to include a focus on waste-free lunches which complements the ACT Health Directorate Fresh Tastes program.
- Actsmart Schools will deliver classroom presentations on energy efficiency and renewable energy to primary and secondary schools in the week leading up to Earth Hour. A representative from Windlab is will give presentations on renewable energy in the ACT region and how wind energy is contributing to Canberra's goal of being powered by 100% renewable electricity by 2020.

### **Key Information**

EPSDD delivers ten major sustainability programs under the Actsmart banner across the household, low income household, business, schools and community sectors.

### **Background Information – may not be suitable for public disclosure**

The programs are supported by the ACT Government's Sustainability Hub – the Actsmart website. The Actsmart website, launched in February 2015, delivers information and advice on how Canberrans can take action via community sectors i.e. Households, Business, Schools and Community.

The Actsmart website is designed to be a one-stop shop for sustainability for the community making information simple and encouraging action.



The Actsmart programs are also supported via social media including Facebook and Twitter. Event details and good news stories from Actsmart businesses, schools and residents are promoted and shared using social media.

The Actsmart programs are supported by key events throughout the year including:

- The Annual Business Sustainability Awards (Awards) recognise the sustainability contributions of Actsmart businesses and public event holders and has been running since 2010. At the most recent event, held in May 2017, more than 150 business clients attended with 13 awards presented from over 60 nominations. This year's event will be held on Thursday 24 May 2018.
- A champion's breakfast was held in 2016 where invited clients not currently participating in the Business programs heard from Actsmart champions on how they successfully rolled out the programs in their workplace. Feedback was excellent and the event was trialled as a lunch at the 2017 Annual Business Sustainability Expo (Expo).
- The Annual Business Sustainability Expo provides businesses and public event organisers with a holistic approach to sustainability, with exhibitors showcasing the latest products and services to assist with energy and water efficiency and better waste management. The Expo has been running since 2012 and has the Canberra Business Chamber as a partner. The 2017 Expo was held in September 2017, had almost 400 attendees and was our most successful Expo to date. The event featured a main stage program, displays of the latest green products and services, interactive workshops, inspirational speakers and networking opportunities.
- The Actsmart Schools Earth Hour Competition Awards was held in May 2017 at the Legislative Assembly. The competition attracted 58 entries which included posters, poems and social media posts submitted by primary, secondary and college students. Entries showcased innovative activities undertaken during School Earth Hour by the whole school. The competition gave schools and individual students the opportunity to creatively express their commitment to a sustainable ACT—and, by extension to the global action for climate change.

<b>Actsmart Household Programs</b>			
<b>Program</b>	<b>Purpose</b>	<b>2016/17 Outputs</b>	<b>2017/18 Outputs (as at 31 December 2017)</b>
Low Income Home Energy Efficiency Program	<ul style="list-style-type: none"> <li>To assist low income households in the ACT to improve the energy efficiency of their homes, reduce their energy and water consumption, reduce their energy and water bills, and contribute to reducing greenhouse gas emissions.</li> </ul>	<ul style="list-style-type: none"> <li>1271 low income households assisted.</li> <li>567 in home energy assessments and draught proofing</li> <li>704 people assisted through workshops/education sessions.</li> <li>88 No Interest Loan Scheme subsidies to 74 applicants (some received more than one subsidy).</li> </ul> <p><b>Savings:</b></p> <ul style="list-style-type: none"> <li>Energy: 328 MWh annual savings. Greenhouse gas emissions: 132 t CO<sub>2</sub> –e annual savings (not including savings from behaviour change following householder education). <i>*These figures are based on a combination of electricity and gas savings which have different emission factors.</i></li> </ul>	<ul style="list-style-type: none"> <li>A total of 386 households have been assisted.</li> <li>262 in home energy assessments and draught proofing.</li> <li>124 people assisted through workshops/education sessions.</li> <li>23 No Interest Loan Scheme subsidies to 19 applicants (some received more than one subsidy).</li> <li>9,598 low income households assisted by the Low-Income program (formerly Outreach) since the programs commenced in 2010.</li> </ul>

<b>Actsmart Household Programs</b>			
<b>Program</b>	<b>Purpose</b>	<b>2016/17 Outputs</b>	<b>2017/18 Outputs (as at 31 December 2017)</b>
Low Income Split Systems	<ul style="list-style-type: none"> <li>The split system program is delivered by a contractor to low income households to enable them to switch to more energy efficient split systems.</li> <li>Energy Efficient Split systems (80 units in 2016/17) are provided to eligible residents after St Vincent de Paul (SVDP) has conducted a home assessment.</li> </ul>	<ul style="list-style-type: none"> <li>94 split systems installed.</li> </ul> <p><b>Savings:</b></p> <ul style="list-style-type: none"> <li>Energy: 763 MWh annual savings.</li> <li>Greenhouse gas emissions: 230 t CO<sub>2</sub> –e annual savings.</li> </ul> <p><i>*These figures are based on a combination of electricity and gas savings which have different emission factors.</i></p>	<ul style="list-style-type: none"> <li>57 split systems have been installed.</li> </ul>
Curtain Program	<ul style="list-style-type: none"> <li>The current curtain program is being delivered through St Vincent de Paul’s volunteer program.</li> <li>Eligible households receive up to two sets of curtains in the main living area to reduce heat loss through windows, and improve privacy and comfort.</li> <li>ACT Government support is through purchasing the material while St Vincent de Paul sources volunteers to make and install the curtains.</li> </ul>	<ul style="list-style-type: none"> <li>163 curtains were installed from 1 July 2016 to 30 June 2017.</li> </ul>	<ul style="list-style-type: none"> <li>Curtains have been installed in 90 households.</li> </ul>

<b>Actsmart Household Programs</b>			
<b>Program</b>	<b>Purpose</b>	<b>2016/17 Outputs</b>	<b>2017/18 Outputs (as at 31 December 2017)</b>
Solar for Low Income	<ul style="list-style-type: none"> <li>• Funding of \$2 million over four years was appropriated in the 2016/17 budget.</li> <li>• Provides financial assistance for low income households to install solar panels to maintain equity as energy prices increase and to remove barriers for low income households to benefit from household solar.</li> </ul>	<ul style="list-style-type: none"> <li>• Program was not operating in 2016/17</li> </ul>	<ul style="list-style-type: none"> <li>• The program was launched on 19 Dec 2017.</li> <li>• Systems Installed: 1</li> <li>• Program is fully subscribed and alternative funding being sourced to meet the high demand.</li> </ul>
Wood Heater Replacement Program	<ul style="list-style-type: none"> <li>• Reduces winter air pollution from wood smoke by offering a financial incentive for replacing an old wood heater with new mains supplied natural gas heating.</li> <li>• Program has run since 2004 with gas subsidy offered by ActewAGL.</li> <li>• The option of installation of high efficiency electric heating was funded by EEIS Tier 2 funds (as a trial) in November 2015.</li> <li>• Option for a \$100 rebate to support households with the cost of removal of wood heater without replacement has been added to the program.</li> <li>• 1,114 households have received rebates over the life of the program (2004 – 2016).</li> </ul>	<ul style="list-style-type: none"> <li>• 66 applications received.</li> <li>• 49 applications for new systems approved.</li> <li>• 9 applications for wood heater only removal approved.</li> <li>• 24 rebates claimed including 9 electric, 13 gas and 2 removal only.</li> </ul>	<ul style="list-style-type: none"> <li>• 12 new applications received so far this financial year.</li> <li>• 11 rebates have been paid this financial year. Eight of these were from applications received in 16/17 FY.</li> <li>• 3 rebates for wood heater removal.</li> <li>• 5 rebates for space split system.</li> <li>• 2 rebates for ducted split system.</li> <li>• 1 rebate for gas.</li> <li>• Gas heating systems ineligible for rebate as of 30 June, 2017, with a grace period to the end of December 2017 to claim.</li> </ul>
Actsmart Sustainable Home Advice	<ul style="list-style-type: none"> <li>• A free service providing independent expert energy efficiency advice to Canberra households via an email service, telephone and face to face at public events and workshop delivery.</li> </ul>	<ul style="list-style-type: none"> <li>• Advice provided through 355 phone/email enquiries.</li> <li>• 1,376 people engaged through workshops and events.</li> <li>• 34 user pay home assessments.</li> </ul>	<ul style="list-style-type: none"> <li>• 164 phone/email enquiries (90 simple, 74 complex).</li> <li>• 11 events/workshops have been held including topics such as ‘Understanding solar’, ‘Draught proofing’, ‘Efficient</li> </ul>

<b>Actsmart Household Programs</b>			
<b>Program</b>	<b>Purpose</b>	<b>2016/17 Outputs</b>	<b>2017/18 Outputs (as at 31 December 2017)</b>
	<ul style="list-style-type: none"> <li>The service helps residents be more comfortable in their homes while saving energy, money and helping the environment.</li> </ul>		Heating' and representations at sustainability events. <ul style="list-style-type: none"> <li>580 people engaged through workshops and events.</li> <li>15 home assessments conducted</li> </ul>
Actsmart Carbon Challenge	<ul style="list-style-type: none"> <li>Established in 2015, the Carbon Challenge is an online tool to get Canberrans involved in becoming more sustainable at home.</li> <li>Individuals can self nominate in challenges over 6 focus areas including energy, waste, water, transport, food and community.</li> <li>Emission savings/badges earned for completed challenges.</li> </ul>	<ul style="list-style-type: none"> <li>'ACT Primary Schools Carbon Challenge' campaign began in August 2016</li> <li>Students competed in three different challenges to earn emissions savings for their school group. These included:               <ul style="list-style-type: none"> <li>Peg it out – hang out the washing rather than use the dryer</li> <li>Heater Savvy – maintain home heating between 18-20 degrees</li> <li>Feeling Seedy – grow your own herb garden</li> </ul> </li> <li>Over 1,500 students/households participated in the challenge</li> <li>This campaign saved approximately 2,290 tonnes of CO<sub>2</sub> emissions collectively across 22 schools; equivalent to taking 618 cars off the road for a year.</li> </ul>	<ul style="list-style-type: none"> <li>3,042 registered users for the Carbon Challenge</li> <li>2018 campaign for "ACT Secondary Schools Carbon Challenge" under development. 1 school registered.</li> </ul>

<b>Actsmart Business Programs</b>			
<b>Program</b>	<b>Purpose</b>	<b>2016/17 Outputs</b>	<b>2017/18 Outputs (as at 31 December 2017)</b>
Actsmart Business Recycling program	<ul style="list-style-type: none"> <li>Provides advice, and support via education, stickers, signage and accreditation to the business and office sector to assist in implementing waste reduction and increase recycling aimed at reducing waste to landfill and CO<sub>2</sub> emissions.</li> <li>Program is delivered on a cost recovery basis via a cross border agreement with Queanbeyan-Palerang Regional Council.</li> </ul>	<ul style="list-style-type: none"> <li>910 sites signed up to the program.</li> <li>439 accredited sites.</li> </ul> <p><b>Savings from accredited sites:</b></p> <ul style="list-style-type: none"> <li>15,380 m<sup>3</sup> of mixed recyclables diverted from landfill.</li> <li>16,860 m<sup>3</sup> of paper and cardboard diverted from landfill.</li> <li>1,693 m<sup>3</sup> of organic material diverted from landfill.</li> <li>Emission savings: 6,383 t CO<sub>2</sub>-e (based on above figures).</li> </ul>	<ul style="list-style-type: none"> <li>878 sites signed to the program as at 31 December.</li> <li>442 accredited sites as at 31 December.</li> </ul> <p>Note: Queanbeyan statistics:</p> <ul style="list-style-type: none"> <li>67 sites signed up</li> <li>37 sites accredited.</li> </ul>
Actsmart Public Event program	<ul style="list-style-type: none"> <li>Provides advice to Public Event holders to assist in implementing recycling at their public event.</li> <li>Program was expanded in 2015 to include advice and guides for event holders in broader sustainability including energy, water and transport options.</li> </ul>	<ul style="list-style-type: none"> <li>70 events with over one million visitors.</li> <li>Events included Floriade, National Multicultural Festival, fetes and festivals.</li> </ul> <p><b>Savings:</b></p> <ul style="list-style-type: none"> <li>46,789 kg of mixed recycling collected.</li> <li>10,804 kg organic waste diverted from landfill.</li> <li>Emission savings: 76 t CO<sub>2</sub>-e.</li> </ul>	<ul style="list-style-type: none"> <li>98 events held from 1 July 2017 to 31 December 2017.</li> </ul> <p><b>Savings:</b></p> <ul style="list-style-type: none"> <li>22,961 kg of mixed recycling collected.</li> <li>1,897 kg organic waste diverted from landfill.</li> </ul>

<b>Actsmart Business Programs</b>			
<b>Program</b>	<b>Purpose</b>	<b>2016/17 Outputs</b>	<b>2017/18 Outputs (as at 31 December 2017)</b>
Actsmart Business Energy and Water program	<ul style="list-style-type: none"> <li>• Provides advice and financial assistance for efficiency upgrades to small businesses in the ACT to assist in reducing energy and water consumption.</li> <li>• Offers onsite energy and water assessment and tailored energy and water action plan, with recommendations for efficiency upgrades.</li> <li>• A \$5,000 rebate is available on a 50/50 cost sharing basis to assist businesses with costs of efficiency upgrades.</li> <li>• 682 businesses have participated to the EoFY 2016/17, with 357 claiming the rebate.</li> <li>• Estimated lifetime energy savings from the upgrades installed since program commencement to EoFY 2016/17 are 40,080 MWh, equivalent to the energy used by 5,482 houses a year.</li> </ul>	<ul style="list-style-type: none"> <li>• 204 businesses received an assessment, with 131 sites receiving a rebate in the financial year.</li> </ul> <p><b>Annual savings (estimates for 131 sites who completed retrofits):</b></p> <ul style="list-style-type: none"> <li>• Energy savings: 1,601 MWh.</li> <li>• Business energy bills savings: \$352,200.</li> <li>• Total emission saving: 1,124 t CO<sub>2</sub> –e.</li> </ul>	<ul style="list-style-type: none"> <li>• 70 businesses received an assessment and 43 have received a rebate from 1 July 2017 to 31 December 2017.</li> </ul> <p><b>Annual Savings (estimates for 43 sites who completed retrofits for period 1 July 2017 - 31 December 2017)</b></p> <ul style="list-style-type: none"> <li>• Energy savings: 350 MWh.</li> <li>• Business energy bills savings: \$78,300.</li> <li>• Total emission saving: 157t CO<sub>2</sub> –e.</li> </ul>

<b>Actsmart Business Programs</b>			
<b>Program</b>	<b>Purpose</b>	<b>2016/17 Outputs</b>	<b>2017/18 Outputs (as at 31 December 2017)</b>
Actsmart Medium Business Lighting Efficiency Webtool	<ul style="list-style-type: none"> <li>• Provides businesses with a fast, easy to use self help method for determining what LED lights can be used to replace existing inefficient lighting.</li> <li>• This tool was developed to support medium business but is suitable for use by all businesses.</li> <li>• The Webtool provides estimated capital costs and anticipated dollar savings based on ACT data from LED light upgrades, giving a simple payback period (in years) from the upgrades.</li> </ul>	<ul style="list-style-type: none"> <li>• The Webtool was launched on 1 September 2016.</li> <li>• The Webtool has 9 categories of lights with 22 different lighting types in total.</li> <li>• Interest has been received by other states in acquiring this tool for use in their states.</li> </ul>	<ul style="list-style-type: none"> <li>• 44 businesses have used the Webtool to evaluate lighting upgrade opportunities from 1 July 2017 to 31 December 2017.</li> </ul>



<b>Actsmart Schools Program</b>			
<b>Program</b>	<b>Purpose</b>	<b>2016/17 Outputs</b>	<b>2017/18 Outputs (as at 31 December 2017)</b>
Actsmart Schools Program	<ul style="list-style-type: none"> <li>• 100% of schools (public, private and independent) in the ACT are signed to the program.</li> <li>• Assists schools to: reduce ecological footprint; educate for sustainability through the curriculum; develop a long-term, whole school approach to addressing sustainability; and implement sustainable management practices into everyday school operations.</li> <li>• Schools receive assistance to conduct water, waste and energy audits, a guide to implement actions, then follow-up audits to record reductions in usage.</li> <li>• Offers ACT Teacher Quality Institute accredited professional development activities to Teachers, Facilities Managers, and Senior Students.</li> <li>• Collects and records baseline data from audits on a database for monitoring and reporting progress.</li> <li>• Accredits schools that reduce energy and water consumption and waste to landfill; manage school grounds/biodiversity sustainably and integrate sustainability into the curriculum.</li> <li>• Provides assistance in the delivery of the Education Directorate's - ACT Education Energy Program.</li> </ul>	<ul style="list-style-type: none"> <li>• Five schools received '5 star' accreditation. 43 new accreditations.</li> <li>• Horticulturist visited 32 schools.</li> <li>• Eight workshops held:               <ul style="list-style-type: none"> <li>• 'Sustainability Curriculum' – 33 attendees from 17 schools</li> <li>• 'Senior Eco Bus Tour' – 30 attendees from 9 schools.</li> <li>• 'Junior Eco Bus Tour' – 78 attendees from 15 schools</li> <li>• Taqwa Islamic School – 4 participants</li> <li>• 'Sustainability Coordinators' – 45 attendees from 34 schools</li> <li>• 'Sustainable school grounds' – 52 attendees from 45 schools</li> <li>• 'Waste and recycling' – 42 attendees from 15 schools</li> <li>• 'Curriculum' – 45 people from 26 schools.</li> </ul> </li> <li>• 47 school visits for waste/ recycling support.</li> <li>• 32 schools borrowed waste display.</li> <li>• 27 Student Energy Kits delivered.</li> <li>• 19 energy audits completed.</li> </ul>	<p>Four workshops held:</p> <ul style="list-style-type: none"> <li>• Energy and Water Workshop – 26 attendees from 12 schools</li> <li>• Resource Savvy Schools (Actsmart EXPO) – 13 attendees</li> <li>• Senior Schools Eco Bus Tour – 26 attendees from five schools</li> <li>• Junior Schools Eco Bus Tour – 68 attendees from eleven schools</li> <li>• Horticulturist visited eight schools.</li> <li>• 25 schools visited for waste and recycling support.</li> <li>• 16 general school visits.</li> <li>• Sixteen schools borrowed interactive waste display.</li> <li>• Five schools borrowed the compost and worm farm display.</li> <li>• Seven student energy kits delivered.</li> <li>• Eleven new accreditations.</li> <li>• Six school case studies developed.</li> </ul>

<b>Community Programs</b>			
<b>Program</b>	<b>Purpose</b>	<b>2016/17 Outputs</b>	<b>2017/18 Outputs (as at 31 December 2017)</b>
Community Partnerships	<ul style="list-style-type: none"> <li>From 1 July 2013, Service Funding Agreements with SEE-Change, Canberra Environment Centre and the Conservation Council are managed by Sustainability Programs in the Climate Change and Sustainability Division.</li> <li>Operational funding is provided to these organisations under the Agreements to:               <ul style="list-style-type: none"> <li>protect and enhance the natural systems in the ACT and surrounding region</li> <li>promote a sustainable and zero net emission society</li> <li>increase awareness of and participation in environmental issues.</li> </ul> </li> </ul>	<b>SEE-Change</b> <ul style="list-style-type: none"> <li>32 Newsletters / 16 mailouts to approx 1,600 people</li> <li>74 programs/events/activities</li> <li>984 Facebook likes</li> <li>276 Twitter followers</li> </ul> Activities included: <ul style="list-style-type: none"> <li>Solar House Day</li> <li>Sustainable house tours</li> <li>Chook co-op workshop</li> <li>ACTCOSS Conference presentation</li> <li>Food and fuel security talk</li> <li>Floriade talks</li> <li>Curtain retrofit workshops</li> <li>SEE-Change group meetings to foster grass roots sustainability projects</li> <li>Houseblitz workshop</li> <li>Bike trailers hire</li> <li>Ecological footprint competition</li> <li>Wetlands restoration and education</li> <li>Transition Streets program</li> </ul>	Reporting for the period of Jul-Sep 2017 has been received. Reporting for Oct-Dec 2017 will be provided in early Feb 2018.  <b>SEE-Change</b> <ul style="list-style-type: none"> <li>6 Newsletters to 1,600 people</li> <li>6 events (including sustainable wardrobe)</li> <li>2 Sustainable House Days (Latham and Coombs)</li> </ul> <b>Canberra Environment Centre</b> <ul style="list-style-type: none"> <li>Fortnightly newsletter to 2,714 people</li> <li>Average of 5 social media posts/week to 5,000 people</li> <li>17 workshops/events (including “Halving your household waste” and “Seed Saving” workshop”).</li> </ul> <b>Conservation Council ACT</b> <ul style="list-style-type: none"> <li>Monthly email bulletin (Yellow Box Dispatch) to over 4,500 people.</li> <li>Weekly wrap distributed to 105 member group representatives</li> <li>1,239 Facebook likes</li> <li>917 Twitter followers</li> <li>50 stakeholder meetings</li> </ul>

<b>Community Programs</b>			
<b>Program</b>	<b>Purpose</b>	<b>2016/17 Outputs</b>	<b>2017/18 Outputs (as at 31 December 2017)</b>
		<p><b>Canberra Environment Centre</b></p> <ul style="list-style-type: none"> <li>• Fortnightly newsletters to over 2,200 people</li> <li>• Average of 4 social media posts/week to over 3,300 people.</li> <li>• 65 workshops/events</li> </ul> <p>Activities included:</p> <ul style="list-style-type: none"> <li>• Held Canberra Harvest Festival in March 2017, with approximately 1000 participants.</li> <li>• Weekly garden tours for community and school groups. Garden also hosts a disability employment project.</li> <li>• Development of communal composting system at Stromlo Terrace units.</li> <li>• Establishment of food garden in new Wanniasa housing complex.</li> <li>• Weekly visits to child care centres as part of the Grow Together program (reduce waste/increase nutrition).</li> <li>• Commenced 6 month work for the dole program, to rejuvenate and extend the ANU community garden working with 100 people.</li> </ul>	<ul style="list-style-type: none"> <li>• 6 submissions/commentaries (including “Water Issues in the ACT” and “Murray-Darling Basin – Water Management”)</li> <li>• 2 forums</li> </ul>

<b>Community Programs</b>			
<b>Program</b>	<b>Purpose</b>	<b>2016/17 Outputs</b>	<b>2017/18 Outputs (as at 31 December 2017)</b>
		<p><b>Conservation Council ACT</b></p> <ul style="list-style-type: none"> <li>• Monthly email bulletin (Yellow Box Dispatch) to approx 4,500 people.</li> <li>• 1,204 Facebook likes</li> <li>• 861 Twitter followers</li> <li>• Over 200 stakeholder meetings</li> <li>• 8 forums</li> <li>• 36 submissions/commentaries</li> </ul> <p>Submissions and commentary included;</p> <ul style="list-style-type: none"> <li>• Policy on kangaroo management,</li> <li>• National Park Feasibility Reference Group;</li> <li>• ACT Region Food Council: Draft Terms of Reference and Governance Principles; and</li> <li>• Parliamentary Agreement for 9th Legislative Assembly of the ACT.</li> </ul>	

**ISSUE: RENEWABLE ENERGY PROGRAMS**

**Talking points:**

Large scale renewables and progress to 100 per cent

- In 2016-17, 29.1% of the ACT's electricity supply was from renewable sources. This will increase to around 52% for 2017-18, and is expected to reach around 78% for 2018-19. The figure will move toward 100% over the next two years as the remaining large-scale wind and solar farms are completed. All contracts are on-track to secure the 100% target by 2020.

Next Generation Energy Storage program

- The \$25 million Next Generation Energy Storage Grants program is supporting the roll out of up to 5,000 solar battery storage systems to 2020 in Canberra homes and businesses. These systems will also collect critical data to inform industry research and development.
- The number of systems installed to-date is around 600, with the rate of installation expected to increase in 2018. Following from the first two grants rounds, the successful companies of a third grants round were announced on 18 January 2018. This third grants round allocates around a further \$3 million to continue supporting the battery roll-out.
- Focusing on energy storage for homes and businesses, as opposed to large grid-scale batteries, provides a number of advantages. It allows the ACT to maximise the comparative advantage it has in the development of small-scale renewable energy technology, and it supports the progressive ACT community that is willing to support the installation of battery technology.
- Each system installed is required to meet specific 'smart' requirements and collect critical data to inform industry research and development. The Virtual Power Plant recently trialled by Reposit Power and Evoenergy is a good example of how the mandated 'smart' requirements of the program are stimulating innovation in the local renewable energy industry.

Local industry development

- The renewable auctions also leveraged more than \$500 million in local investment:

- Around two gigawatts of renewable energy is managed from Canberra's renewable energy precinct, which includes leading national and international renewable energy companies such as Neoen, Global Power Generation (GPG), CWP Renewables and Windlab.
- The \$12 million Renewable Energy Innovation Fund is supporting the Hub, a collaborative co-working space in Canberra's renewables precinct. In its first year of operation, the hub helped 30 businesses and held more than 80 industry events.
- The innovation fund is also providing up to \$2 million in seed funding to help local start-ups to develop and commercialise new technology, including new household battery controls, hydrogen fuel cells and solar radiation forecasting.
- The Renewable Energy Skills Centre of Excellence at CIT is now offering one of Australia's first Global Wind Organisation accredited wind safety and technical training programs.

### If asked: Large-scale Generation Certificate (LGC) surrender

- There has been no voluntary surrender of the ACT's LGCs to-date as the Commonwealth Government has been unable to confirm its previous commitment that voluntary surrenders would be additional to national emission reduction targets. It is anticipated that this issue will be clarified through the negotiation of the National Energy Guarantee.

### If asked: Community solar

- SolarShare submitted a new proposal for a Community Solar Scheme in May 2017, and supplementary information was submitted in January 2018. SolarShare proposes building a one megawatt community solar farm next to the existing Mount Majura Solar Farm. The Government is currently assessing the technical and financial risks of the project.

### **Key Information**

The Environment, Planning and Sustainable Development Directorate (EPSDD) is progressing a number of programs aimed at meeting the Territory's 100% renewable electricity target and developing Canberra as a centre for renewable energy investment and innovation.

## Background Information – may not be suitable for public disclosure

### Large scale renewables and progress to 100 per cent

- Approximately 75% of the 100% renewable electricity target will be achieved through generation secured as part of the Government’s award winning reverse auction program for large-scale wind and solar. The remaining 25% will be delivered through GreenPower purchases, roof-top solar generation and the ACT’s share of the national Renewable Energy Target (RET).

The ACT’s large-scale renewable energy projects are summarised below.

	<i>Location</i>	<i>% of 2020 elec. demand</i>	<i>Capacity (MW)</i>	<i>FiT – (\$/MWh)</i>	<i>FiT start</i>
<b>Solar Auction</b>					
Royalla solar farm	ACT	1.2%	20	\$186.00	18-Aug-14
Maoneng solar farm	ACT	0.7%	13	\$178.00	18-Nov-16
Williamsdale solar farm	ACT	0.5%	7	\$186.00	3-Feb-17
<b>First Wind Auction</b>					
Ararat wind farm	Ararat, VIC	8.9%	80.5	\$87.00	14-Apr-17
Coonooer Bridge wind farm	Bendigo, VIC	2.7%	19.4	\$81.50	28-Feb-16
Hornsedale 1 wind farm	Port Augusta, SA	13.6%	100	\$92.00	16-Feb-17
<b>Second Wind Auction</b>					
Hornsedale 2 wind farm	Port Augusta, SA	13.2%	100	\$77.00	01-Dec-18
Sapphire 1 wind farm	Glenn Innes, NSW	11.5%	100	\$89.10	1-May-18
<b>Next Gen Auction</b>					
Hornsedale 3 wind farm	Port Augusta, SA	13.6%	109	\$73.00 (\$78.00*)	01-Oct-19
Crookwell 2 wind farm	Capital Region	10.0%	91	\$86.60 (\$90.40*)	17-Sep-18

\* Price includes Energy Storage Contribution (ESC)—contributing to the \$25 Million Next Generation Energy Storage Program

### Next Generation Energy Storage program

The program has been operating since April 2016 and is funded from \$25 million in industry funding secured through the 200MW Next Generation Renewables Auction (from the Crookwell 2 and Hornsdale Stage 3 wind farms).

The current subsidy is \$825 per kilowatt (kW) of Sustained Peak Output. For the average residential battery system, this equates to around a \$4000 rebate, bringing the total installed cost of a typical solar PV and battery system to around \$12,000 to \$16,000. The cost and rebate varies significantly between systems.

The subsidies are provided via eight battery installers who were selected through a competitive grants process. This ensures the best value for money for the Territory, and that batteries are only installed by skilled and accredited tradespeople. The process also favoured installers who committed to contributing to the local renewable energy industry.

### Large-scale Generation Certificate (LGC) surrender

The deeds signed with the proponents of all successful projects in the ACT's large-scale reverse auctions require them to transfer to the Territory the LGCs created by the generation for which they have received feed-in tariff payments.

It remains Government policy that the default position will be to voluntarily surrender the LGCs. However, the Government will consider the appropriate use of its LGCs on an annual basis given the ongoing uncertainty about Commonwealth Government guarantees on the additionality of such surrenders.

### Community solar

The Community Solar Scheme was a commitment in the 2012 ACT Parliamentary Agreement. In February 2014, The ACT Government approved the release of 1MW of capacity for the Scheme under the *Electricity Feed-in (Large-scale Renewable Energy Generation) Act 2011*.

After two requests for proposal periods, the most recent in 2014-15, SolarShare submitted a new proposal in May 2017. SolarShare has already conducted some fundraising for the project, reportedly securing \$2.89 million in local investor commitments for the project.



**ISSUE: CARBON NEUTRAL GOVERNMENT****Talking points:**

- The ACT Government is leading by example through the Carbon Neutral Government (CNG) Framework in working to achieve carbon neutrality in its own operations by 2020.
- Endorsed in 2012, the CNG Framework enables and coordinates a whole-of-government approach to achieving carbon neutrality in government operations in a cost-effective manner by 2020. Government emissions currently account for around 4% of the ACT's greenhouse gas emissions profile.
- ACT Government emissions have fallen by an estimated 11% since 2012-13, even while service delivery has increased. This has been achieved through mitigation actions like large-scale energy efficiency upgrades and the transition to 100% renewable electricity by 2020.
- To become net carbon neutral means that any residual emissions will need to be fully offset by the generation or purchase of carbon credits/offsets, at a cost to Government of approximately \$1 – 2 million per year.
- The *Climate Strategy to a Net Zero Emissions Territory* discussion paper raises the social cost of carbon (SCC) as an alternative way to offset the total future economic damage of emissions; it is estimated that this would cost the ACT Government approximately \$4.6 million per year from 2020.
- 26 ACT Government projects have been supported under the CNG Fund since 2010, to a value of approximately \$14.5 million. A diverse range of projects have been supported including: lighting upgrades; heating, ventilation and cooling (HVAC) upgrades; smart building management systems; and an off grid solar photovoltaic system connected to battery storage.
- These projects make ongoing annual cost and energy savings from the date of their implementation. Project savings are currently estimated to be more than \$2 million per year. Measurement and verification of projects is ongoing.

- A grant stream of the CNG Fund was established in 2017, for innovative and new types of project. The grant stream allows for a more flexible approach, funding potential projects that do not meet eligibility requirements for a loan but still present an opportunity for the ACT Government to encourage innovation and demonstrate leadership in reducing emissions to meet its 2020 carbon neutrality target.
- The Enterprise Sustainability Platform (ESP) provides Directorates and other agencies with comprehensive information on energy and water consumption, cost and greenhouse gas emissions data required for reporting and resource management planning.
- ESP data underpins the tracking of formal energy reduction targets, derived from carbon budgets, which set an annual cap on energy consumption for an agency.
- Since July 2016 energy targets have been used as an accountability indicator in Director-General performance agreements.

**Key Information**

A CNG Implementation Committee, consisting of a representative from each Directorate, was established in 2013 to coordinate efforts across Government and oversee implementation of the CNG Framework. The Committee reports annual progress to the ACTPS Strategic Board.

**CNG Fund**

To facilitate the transition to carbon neutral government operations, the CNG Program team in EPSDD administers the CNG Fund, maintains the ESP database of energy, fuel and water consumption, costs and emissions, and provides training and assistance to agencies in reducing and reporting energy and emissions. Three energy project officers in ACT Property Group also provide a whole of Government energy efficiency service.

The CNG Fund provides interest-free loans to agencies to support approved energy efficiency projects. Energy savings are used to repay the loan, replenishing the CNG Fund and making funds available for new projects. The current balance of the Fund is approximately \$4.8 million. To access the Fund, ACT Government agencies are required to have a current Resource Management Plan and a business plan outlining how the loan will be repaid.

From July 2012 the ACT Government redirected the majority of its GreenPower budget to support energy efficiency projects through the CNG Fund. GreenPower currently makes up 5% of the ACT Government's electricity purchases, and this proportion will be maintained until the 2018-19 financial year.

**CNG Framework Review**

The CNG Framework was reviewed during 2016-17. The review evaluated progress on implementation strategies and actions under the Framework, considers existing measures and successes to date, and recommends actions required to ensure that the ACT Government achieves net zero emissions by 2020, and further reduces and maintains net zero emissions beyond 2020. The final review report will be provided to the CNG Implementation Committee, the ACTPS Strategic Board, the Minister for Climate Change and Sustainability and the Chief Minister.

**Background Information – may not be suitable for public disclosure**

In 2018-19 ACT Government agencies will transition from energy efficiency to greenhouse gas emissions reduction targets. This change is aimed at increasing focus on reducing emissions from natural gas and transport. The first agency emissions reduction targets will be provided to the Head of Service in June 2018 and will become publicly available in July 2018.

To improve transparency, all agency targets and progress reports will be reported publicly. Targets and reports for 2017/18 will become available from April 2018.

The Enterprise Sustainability Platform (ESP) was fully implemented in 2014 to provide accurate and reliable data to government entities covered by the CNG Framework and enable consistent reporting on GHG emissions. The 2010-11 and 2011-12 ACT Budgets provided \$407,000 and \$780,000 respectively for the establishment and ongoing operation of the ESP project over four years. This period concluded at the end of June 2016. The cost of the ESP is currently covered by contributions from existing ACT Government agency budgets. A new ESP contract commenced on 20 October 2017, for a 2+2 year term.