



ACT'S CLIMATE STRATEGY

COMMUNITY ENGAGEMENT REPORT July 2018



Cover image is the winning entry to the Climate Change photography competition by Bhaumik Bumia

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This report consistently applies a set of terms related to the results of engagement and how these have been analysed.

- » **Contributions:** Responses to the discussion paper, in the form of an entire submission of any sort. These range in size and complexity from single phrases gathered from the blackboard at the Multicultural Festival, to lengthy emailed submissions. Major contributions included 116 written contributions to the YourSay web page and 100 emailed submissions.
- » **Suggestions:** Taken from the Contributions for consideration in future climate policy development¹¹. Over 2,000 suggestions were made across all contributions. After identifying overlaps between these suggestions (e.g. multiple submissions suggesting more trees be planted), over 900 unique suggestions were identified.
- » **Ideas:** High level propositions for possible climate change actions. Some contributions contain multiple ideas (especially emailed submissions), and most ideas were included in multiple submissions (such as “more electric vehicles”, “more rooftop solar” or “plant more trees”. A total of 36 ideas were recorded.
- » **Grouped ideas:** A mix of ideas and suggestions developed for this report. These provide major groupings within each sector for the purpose of communicating engagement outcomes.
- » **Sectors:** Seven government climate-related functions, including energy and buildings, transport, living infrastructure, waste, planning, industry and economy (grouped together in this report).

¹¹ Suggestions are referred to as 'sub-ideas' in some associated documentation



Stall at the National Multicultural Festival, February 2018

EXECUTIVE SUMMARY

This report presents results of community engagement conducted during 2017 and 2018 to inform the development of a new climate strategy for the ACT (climate strategy).

It explains the processes used to present information to and seek input from ACT residents, businesses and other stakeholders and gives an overview of the suggestions made to government as a result of these engagement efforts. The engagement efforts covered in this report include engagement during the formal public consultation period on the 'ACT's Climate Strategy to a Net Zero Emissions Territory Discussion Paper' (discussion paper) from 11 December 2017 to 9 April 2018, as well as preceding consultation with stakeholders from January to November 2017.

Almost 60 individual engagement events together with social media reached over 65,000 people. Those who responded contributed suggestions on how the ACT can become a net zero emissions territory. These suggestions were overwhelmingly positive, demonstrating a high level of public support for action to reduce emissions and increase resilience to climate change impacts.

Although some contributions encouraged caution, no response opposed transitioning to net zero emissions by 2045. This was despite concerted efforts to engage with all community sectors, including those who are not necessarily engaged in climate change action, and communication of potential costs and complexities of the transition.

This report also discusses how suggestions made to government are being collated and considered for possible inclusion in the climate strategy. Hundreds of contributions have been categorised into over 900 unique suggestions. These suggestions have been grouped further for the purposes of this report into 36 specific ideas across nine broad topics (including seven key sectors) associated with government climate-related functions. Suggestions related to each sector are presented through, pie charts, and direct quotes showing both representative and atypical ideas for each topic. The report also includes some cross-sectoral analysis on groups of people, organisations and initiatives that were most frequently identified by respondents as needing government support.

BACKGROUND AND OVERVIEW

Climate change is already affecting communities around the world. In the ACT, climate change means longer, hotter summers and more heatwaves, increased risk of bushfires and more variable rainfall.

The ACT's current climate change strategy (Action Plan 2) sets out a pathway to reduce the ACT's greenhouse gas emissions by 40% from 1990 levels by 2020. This is being achieved by transitioning the ACT to 100% renewable electricity by 2020. This transition is on track to be delivered by 2020 mainly through the ACT Government's innovative renewable energy reverse auction process, which has delivered some of the nation's cheapest renewable electricity for the ACT and attracted over \$500 million in local investment. As we approach 2020 and achieve these initial targets, a new climate strategy is needed to guide our emission reduction and climate resilience work and ensure we continue to enhance our climate action efforts and lead by example.

In December 2017 Government released the *'ACT's Climate Strategy to a Net Zero Emissions Territory Discussion Paper'*² (discussion paper) to seek community views to inform the development of a new climate strategy. The discussion paper was informed by early engagement with stakeholder from January to November 2017, including via community and stakeholder roundtables. The discussion paper highlighted key sectors where emissions reductions will be required (e.g. transport, waste and energy), and the importance of individual behaviour change (e.g. choosing to cycle rather than driving). The discussion paper sought community feedback on what should be included in the climate strategy. The information gathered during this period of engagement is being considered, together with research, modelling and expert advice, in the development of the climate strategy.

In May 2018 the ACT committed to a new, nation-leading target of achieving net zero emissions by 2045. This target is the most ambitious of any Australian state or territory, and among the most ambitious targets internationally. Legislation will be introduced to formalise the 2045 target along with a series of interim targets to ensure we stay on track to achieve net zero emissions.

The new targets are:

- » 50-60% below 1990 levels by 2025;
- » 65-75% below 1990 levels by 2030;
- » 90-95% below 1990 levels by 2040; and
- » net zero emissions by 2045 (previously 2050).

In March 2018, initial economic modelling was undertaken on a range of possible policy measures and technologies that could contribute to reducing ACT emissions. The modelling showed that the ACT could meet the 65% reduction target at a welfare cost of around \$32 per tonne of abatement, which equates to a total cost of around \$5.8 million to 2030. The modelling also showed that actions taken in the ACT to reduce emissions could be cost-neutral because of the cost savings and co-benefits that emissions reduction policies can achieve (e.g. reduced health expenditure resulting from increased climate resilience of buildings or avoided need for expensive upgrades to the electricity grid due to improved efficiency).³

Note that the numbers relating to suggestions, submissions, engagement efforts and ideas may differ between this report and others, such as the Listening Report. This is mostly because this report includes the early engagement activities held throughout 2017 which helped to inform the discussion paper, as well as engagement on the discussion paper itself.

² Available at <https://yoursay.act.gov.au/zero-emissions>

³ https://yoursay.act.gov.au/download_file/view/1493/647

What does an environmentally friendly future look like?



Blackboard suggestions from the National Multicultural Festival, February 2018

ENGAGEMENT EFFORTS, REACH AND IDEAS

 **3000**
YourSay
WEBSITE VISITS

Government made strong efforts to engage with any interested stakeholders.


This effort was led by the Climate Change and

Sustainability Division of the Environment, Planning and Sustainable Development Directorate (EPSDD). Consultation occurred in two major rounds. The first round of consultation in 2017 informed the development of the discussion paper. The second round of consultation ran from 11 December 2017 to 9 April 2018 and invited comments on the discussion paper. The discussion paper included information and a series of questions focused on how best to achieve net zero greenhouse gas emissions and build resilience to climate change impacts.

The combined effort and reach of these engagement processes are summarised in the pie charts in Figure 2. Between them these show where **efforts** were made to achieve engagement, the number of people **reached** through these efforts, and the sources of **suggestions** that are presented in this report.

Printed discussion papers were handed out at events and meetings. The community could also access the discussion paper through the YourSay website.⁴ The discussion paper YourSay page recorded **3,000 visits** during the consultation period. During this time, over **900 people** **voted** in quick polls, and **116 submitted written** contributions via the YourSay web page. The YourSay website was promoted at all engagement activities as the way to gain further information and make a submission.

 **116**
written
contributions
on YOURSAY

 **900**
people
voted

Of the 100 emailed submissions, 14 were from community interest groups, nine from industry peak bodies, four from private businesses and two from research institutions. One was from an area of the Government and the remainder were individual submissions.

⁴ <https://www.yoursay.act.gov.au/>

100 **emailed** **SUBMISSIONS**

Officers spoke to members of the community at community drop-

in sessions at local libraries, and through stalls at major events including the Canberra Show, Multicultural Festival and university open days. These public events provided direct face-to-face contact and conversations about the discussion paper and climate change more generally with over 1,100 people and yielded 231 suggestions.

Attending meetings was another way of involving the community in strategy development. Presentations were delivered to 25 groups and this effort directly reached around 500 people. Notes taken during the presentations and subsequent discussions yielded a total of 68 suggestions. Many of the people who attended these groups would also have made some of the **100 emailed submissions** that were received, but it is not possible to assess the source of each submission.

Meetings were also hosted or attended by EPSDD specifically to talk about the discussion paper. These included dedicated community and stakeholder roundtable meetings, 'climate cafes' and other meetings arranged by non-government groups or organisations. Eleven such meetings were held, and these reached around 180 people. These meetings were rich sources of ideas, with the roundtable held in March 2018 generating 107 suggestions.

In addition to these engagement efforts, advice was sourced from specialists to inform the discussion paper, and this advice was widely promoted and made available on the YourSay website.⁵ It will continue to inform the development of the climate strategy.

Ongoing engagement also occurred with the Climate Change Ministerial Advisory Group, and the ACT Climate Change Council. These two formal groups provided advice to the Minister and played an important role in shaping the discussion paper and the development of the strategy.

Figure 1: Engagement efforts, reach and suggestions



⁵ <https://www.yoursay.act.gov.au/zero-emissions>



116 photo ENTRIES

Social media was used extensively in the consultation. A total of **28 social media posts**

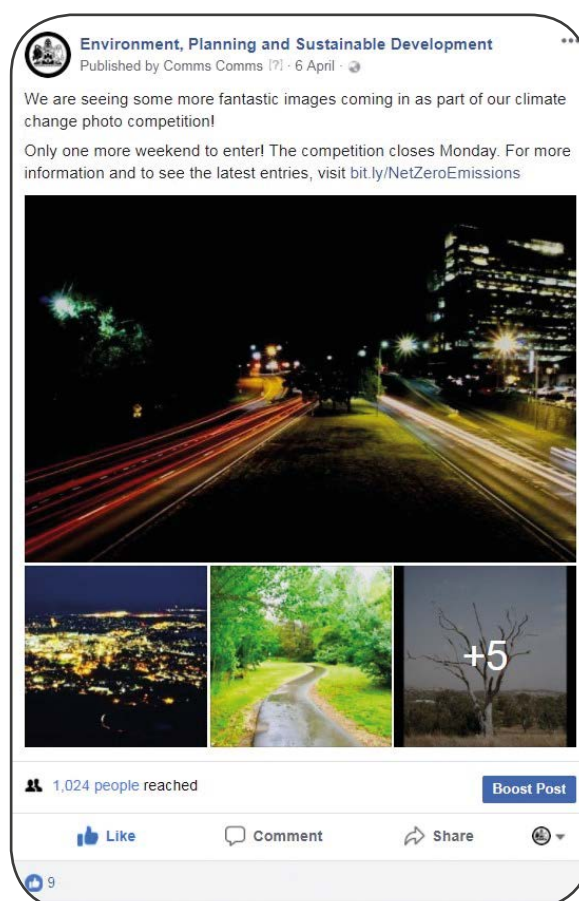
were delivered, with a total reach of over 60,000. An example of a social media post is below. These replies are shown in the box on p.28, which looks at challenges to dominant themes.

A final approach to gathering suggestions for the climate strategy was a photo competition. This competition offered \$1,750 prize money for images that explored how our region is being affected by climate change, as well as how people are responding to this change to create a more sustainable city.

A total of **116 photo entries were received**. A snapshot of images received through this process is included at Figure 7 and more can be viewed online.⁶ The winning entry is included on the front page of this report.

Together with stalls and talks at events unrelated to climate change, the photo competition was an effort to explore climate change concepts with the general public, including people who may not generally express their views on this topic.

Social media post



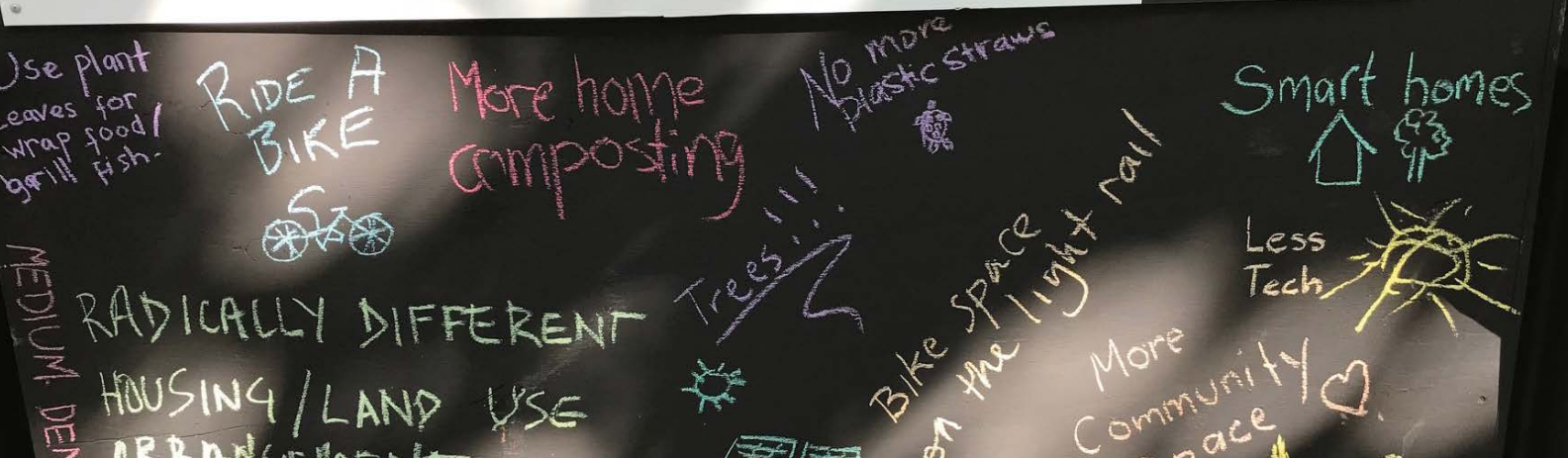
⁶ www.yoursay.act.gov.au/zero-emissions/photo-competition

What does an environmentally friendly future look like?



act
smart

act
smart



ANALYSING RESPONSES

Categorising suggestions into sectors

Government aimed to consult broadly and take account of all suggestions in developing the climate strategy. The following approach was used.

1. Gathering submissions and suggestions

- » As described above, submissions were invited through a wide range of events, on-line promotions, presentations and distribution of printed materials. Over 65,000 people were reached through these efforts.
- » Suggestions were gathered directly at each event, in a format that suited the event. This included:
 - notes from butchers' paper and discussions were gathered from meetings and presentations
 - blackboards filled with suggestions were photographed at the Multicultural Festival
 - YourSay and emailed submissions were collated together with these other sources of suggestions.
- » Suggestions made in 2017 consultation towards the discussion paper were also included.

2. Developing a Register of Ideas and overlaps

- » All of the suggestions were gathered into a **Register of Ideas** spreadsheet. The Register of Ideas will be made available on the YourSay website.
- » To develop the **Register of Ideas** spreadsheet, analysis was undertaken to classify individual suggestions into broader ideas and sectors, and to identify over 900 distinct suggestions that had been proposed.
- » This work also identified multiple times that each suggestion had been made in separate contributions, which was taken as a partial indication of the weight of community commitment to each suggestion. Suggestions were made over 2,000 times and this sum of total suggestions is used in the analysis by sector below.

Postcard inviting submissions and photo competition entries



3. Considering suggestions in the Register of Ideas

- » The Climate Change and Sustainability Division is now in the process of considering the suggestions collated in the Register of Ideas for possible inclusion in the climate strategy. This work includes consulting with other policy and program areas within Government as necessary.

Cross-cutting themes

Although it was possible to analyse most of the suggestions on the basis of key sectors for climate change action, many also focused attention outside of sectoral groupings. In particular, there were numerous suggestions for supporting vulnerable people, ensuring community engagement, continuing to set targets and reporting on results. These suggestions were analysed as a set of cross-cutting themes, and were subject to the same analysis as described above with the suggestions grouped as follows:

- » general suggestions on the climate strategy overall including its broad elements
- » process suggestions, focused on the ways in which government can deliver integrated, cost-effective policies and programs towards preferred climate change outcomes
- » supporting comments, emphasising different groups, people and approaches that the government has been urged to support
- » challenging comments, which present counterpoints to dominant suggestions for transitioning to net zero emissions.

Suggestions on cross-cutting themes are reported through, pie charts and quotes.

ANU Climate Café event, 14 March 2018 (An event hosted by the ANU Climate Institute as part of their Climate Café program of events.)





OVERALL COMMENTS

Looking across all of the submissions and suggestions, some key messages stand out. It is clear there is a high level of broad support for the proposed targets and approach to climate action. There was a dominance of suggestions relating to energy and buildings, transport and living infrastructure.

BROAD SUPPORT

Of the over 2,000 suggestions received in this engagement process, there were only two comments (received as comments on social media posts) that showed opposition to the overarching proposal to tackle climate change through strong and strategic commitment to net zero emissions.⁷

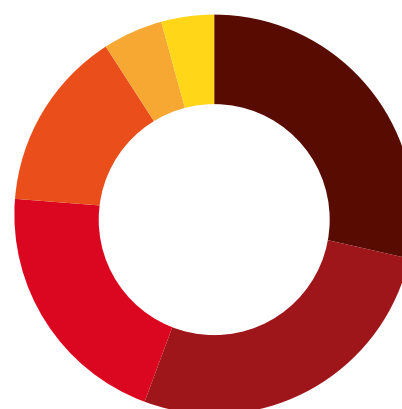
This overwhelmingly positive response was consistent across the broad cross section of the community that was engaged during this period.

The absence of any other submissions opposing the ambitious climate action does not prove that no opposition exists. However it is significant, since it is a strong indication of broad community support for the ACT continuing to act on climate change.

Another indication of the positive approach to tackling climate change is suggested by the 82% of actions proposed to enhance existing efforts, compared with 18% that focused on reducing something that is happening.

Details of specific actions can be found in Figure 2, which shows that suggestions for positive actions far outweighed recommendations for reducing efforts in every sector.

Figure 2: Overall sectoral comments



SUGGESTIONS BY SECTOR

-441 Buildings and energy
-419 Transport
-318 Living infrastructure
-226 Waste
-75 Planning
-66 Industry and economy

⁷ These two comments are shown as the final two quotes in this report, in the final section on challenges to dominant ideas.



Entry to the Climate Change photography competition by Jake

SECTOR ANALYSIS

Of the seven sectors reflecting government climate-related functions, three accounted for over 76% of all suggestions.⁸ These were:

- » energy and buildings
- » transport
- » living Infrastructure.

The breakdown of suggestions by sector is shown by Figure 3. This suggests that while all of the sectors are important, these three are the highest priority areas for many Canberrans.

The following sections of this report present the suggestions made about climate action and the discussion paper, and are organised with most common suggestions first.

⁸ Note that the total sectoral suggestions report here includes multiple times many suggestions were made but excludes general and (process on-sectoral) suggestions.

Figure 3: Action ideas by sector

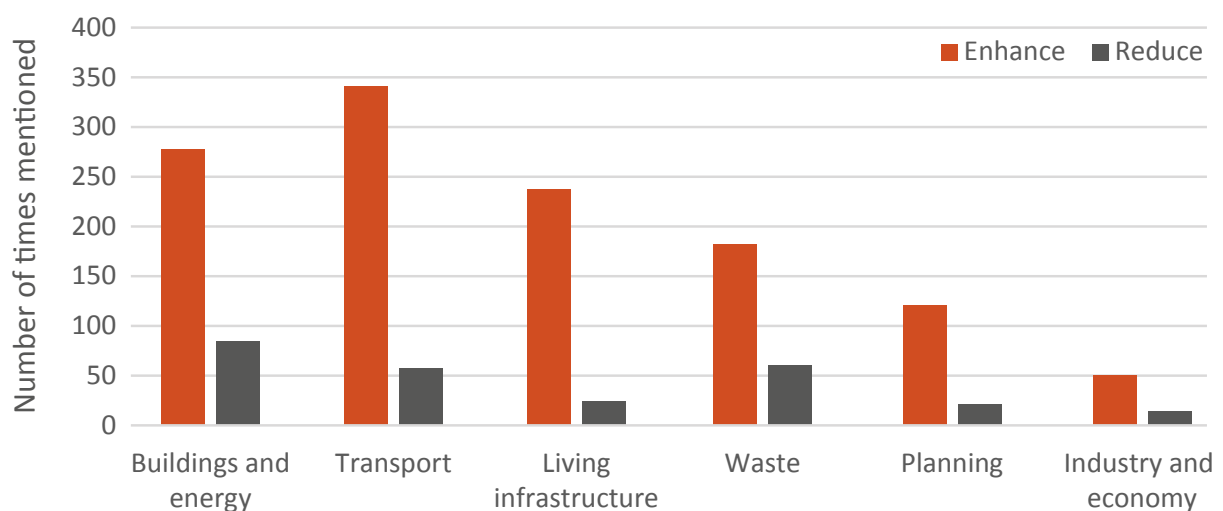




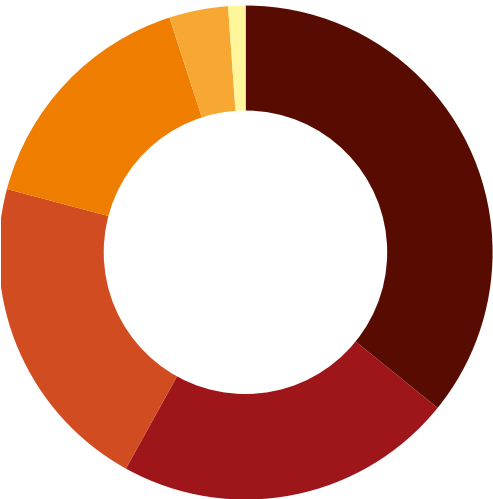
Photo competition entry by Tom Dears

COMMENTS BY SECTOR

5.1 ENERGY AND BUILDINGS

The ACT has made significant progress towards reducing climate change impacts from buildings by pursuing 100% renewable electricity by 2020. The ACT is on track to achieve this goal, contributing to a 40% reduction in the ACT’s greenhouse gas emissions on 1990 levels by 2020.

Figure 4: Grouped ideas on energy and buildings



ENERGY AND BUILDINGS

-158 Improve new and existing buildings
-98 Transition to renewable energy
-93 Promote energy efficiencies
-70 Promote renewables uptake
-17 Promote energy storage
-5 Other

We received 441 suggestions about how energy and buildings can contribute further to climate change solutions.

Comments were also received about the importance of reducing gas made from fossil fuels, energy use in general, costs to consumers, and emissions from a range of sources.

Figure 4 shows grouped of ideas for reducing emissions and increasing efficiency and resilience from energy and buildings. There were 158 suggestions about ways to improve new and existing buildings. Another 98 suggestions focused on transitioning to renewable energy, while 93 encouraged a focus on energy efficiency.

Some direct quotes on these suggestions are in the box on the next page. Some of the suggestions were typical of those grouped into this category, while other atypical ones are also highlighted to show the breadth of community interest.

Comments on Energy and Buildings

Improve new and existing buildings

- » Encourage climate resilient buildings – requirements for rental houses, better design and fitting of public housing, subsidise double-glazing and insulation.
- » Reducing greenhouse emissions is essential, but we also need strong climate adaptation actions in place to cope with the climate impacts that are already locked in. For example, our buildings and housing need to be better insulated, we need ‘cool zones’ for vulnerable people to go to during extreme heat, and we need to take advantage of ecosystem services to strengthen our resilience.

Promote energy efficiencies

- » Continue to expand energy efficiency and demand management schemes and incentives where this would reduce the overall costs of the ACT’s net zero emissions strategy to customers.

Promote renewables uptake

- » Please bring back solar panel rebates. We use solar hot water and we were saving up to install solar panels until the program got discontinued.

Promote energy storage

- » Increase uptake of batteries.
- » Increase energy storage capacity across the network to help reduce peak demand and hence network infrastructure spend.

Transition to renewable energy

- » Energy efficiency is part of the solution (to reduce demand) but doesn’t actually get us to net zero emissions. We need a balanced approach to shifting electricity and transport to zero as well as increasing efficiency of operations.
- » Our apartment complex is considering getting communal solar panels to power communal light, however it is difficult to find information on this. Some information on the steps required for this that could be used in discussions with Strata companies would be really useful. If it can demonstrate that it is straight forward, then more residential complexes may be more likely to get solar panels as well.
- » Support alternative gas sources such as biogas provided safely.

Other

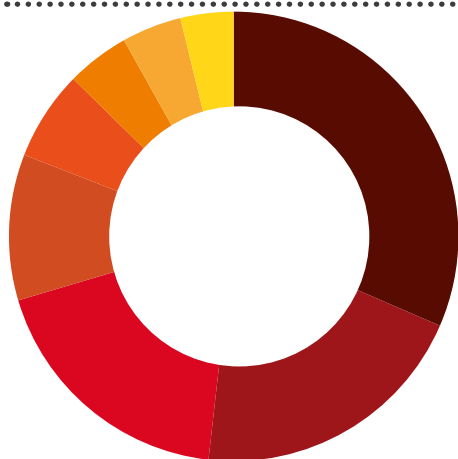
- » Shift to 100% renewable electricity is great, but we need to look beyond energy.
- » Offsetting emissions is very appealing but I strongly believe that they should be used only as a last resort for industries that face significant technological challenges or have no known alternatives. Offsetting effectively allows polluters to continue to pollute rather than putting genuine efforts into mitigation and abatement.
- » There will most likely be an emissions gap to achieve the carbon neutral government target by 2020 and net zero in 2050. Government could buy offsets to address this gap, or could acknowledge the shortfall and reinvest that money in the ACT economy in actions that will drive emissions reductions. Offsets will run out. Aim should be not to use offsets.



5.2 TRANSPORT

Transport planning is linked to health and active travel, wellbeing and social inclusion. These links are highlighted in Transport for Canberra, which includes strategies on public transport, active travel, roads, parking, fleet and freight, and transport infrastructure.⁹ Many of these ideas also have implications for other policy areas, such as planning, and policy development is coordinated within government. The Transport for Canberra Strategy is being reviewed at the same time as the Climate Strategy.

Figure 5: Grouped ideas on transport



TRANSPORT

-132 Increase EV uptake
-85 Promote public transport use
-78 Other options to reduce transport emissions
-44 Promote bike travel
-27 Disincentivise car use
-19 Promote ridesharing
-18 Promote active travel in general
-16 Address emissions from government fleet

⁹ https://www.transport.act.gov.au/about/policy/transport_for_canberra_policy

As such, the way these ideas have been categorised in this report should not be taken as an indication of single-agency policy development.

Through engagement on the climate strategy, we received 419 suggestions about how transport can contribute to climate change solutions. Figure 5 shows grouped ideas about transport.

People talked most about electric vehicles (EVs). A total of 132 comments supported increasing EV uptake. Proposed enhancements included making EVs more affordable, EV incentives and EV registration rebates. Many suggestions were also made about EV charging stations, including increasing their number, speed and regional distribution. There was strong support for converting the government car fleet to EVs and also establishing a full fleet of electric buses which connect effectively to electric light rail. There were many suggestions about public transport, focusing on fast, cheap, frequent and safe options. People also talked about active transport, walking and cycling in particular, seeking to make it more direct, safe, accessible and protected from weather and roads.

There were many ideas for how to reduce emissions from transport such as by reducing the number of cars, improving vehicle efficiency, and introducing disincentives to car use, such as reduced access to major centres and car parking.

Some individual suggestions about transport are in the box on the following page.

Comments on Transport

Increase EV uptake

- » Parking areas in apartment buildings typically have a small number of power points available. Require bodies corporate to allow owners to piggyback onto any existing, body corporate owned power supply – owners to pay cost of installation and consumption.

Promote public transport use

- » Our bus network needs to be fundamentally redesigned away from the hub-and-spoke model to a more networked arrangement with smaller buses operating more frequently so that people have greater flexibility to travel directly between origin and destination rather than being forced to spend significant time being routed through multiple town centres.
- » Why are there no park and ride facilities near schools and child care facilities so that a parent can drop their kids at school in the car with baby/kid seats and then hop on public transport to work? Many working families I talk to comment on the lack of convenience between kid drop-off and pick up and then having to commute to work in their own cars because they can't catch public transport from school/childcare to work.
- » Introduce additional Park and Ride facilities in order to encourage greater use of public transport.
- » Offer one day a month that is free travel for all on ACT buses for a year, so at least people can try them, then see if the bus use increases on other days.

Promote bike travel

- » Stop building roads for motor vehicles, instead build for bikes and people, and support facilities on these bike/ pedestrian paths.
- » I ride everywhere I can around Canberra, to work, to socialise and as a source of health outdoors recreation that involves no carbon emissions. I live in Canberra to a large extent because of the great network of open spaces and cycle paths which makes moving through the city by bike a highlight of my day. I love the route I take to work in Civic along the Sullivan's Creek bike path, wind blowing in my hair, sun on my face, birds singing and other friendly cyclist around me.

Disincentivise car use

- » Registration fees could be increased.
- » Parking could be made less available.
- » Parking fees could be increased.

Promote ride sharing

- » Why is there no discussion of car sharing/carpooling apps to encourage people to ride share and reduce the total number of cars on the road?

Promote active travel in general

- » We need to provide accessible and user friendly low carbon public transport and encourage greater uptake of active travel options.

Address emissions from government

- » Introduce electric vehicles into the government fleets.
- » Choose only plug-in models for the government car fleet. When those are sold they become cheap EVs for the rest of us.

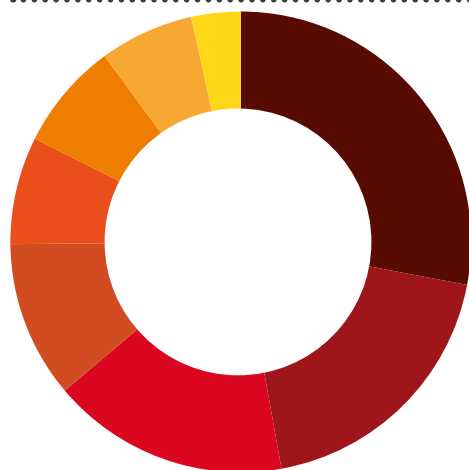




5.3 LIVING INFRASTRUCTURE

Natural systems and processes can be harnessed to protect communities against excessive heat or flooding. They can improve air, soil and water quality, as well as increase public amenity. When natural elements and features such as wetlands, the urban forest and green refuges are incorporated into the design and operation of cities, this is called ‘living infrastructure’.

Figure 6: Grouped ideas on living infrastructure



LIVING INFRASTRUCTURE

-89 Plant more trees to meet multiple objectives
-61 Take an informed and strategic approach
-53 Involve the community
-35 Connect plants and buildings
-24 Address water issues
-24 Avoid deforestation
-21 Address heat risk
-11 Improve health of living infrastructure

Canberra’s *Living infrastructure information paper* describes steps that have already been proposed to investigate and integrate living infrastructure better into Canberra into the future.¹⁰

We received 318 suggestions about how living infrastructure can contribute to climate change solutions. People suggested enhancing tree maintenance by residents, the ratio of green to built spaces, replacing any trees that are removed, green roofs and vertical gardens, water sensitive urban design and more. They suggested reducing heat islands, deforestation, bushfire risk, parking under trees and more. The breakdown of these suggestions into grouped ideas is shown in Figure 6. Direct quotes from various contributions are presented in the box on the next page.

The largest group of comments focused on planting trees and other plants to meet multiple objectives such as to support native biodiversity, food production and for shade and other protection from weather. Many suggestions also focused on taking an informed and strategic approach to living infrastructure. These suggestions emphasised the need to gather data on what living infrastructure is suitable for different locations. Many suggestions were about involving the community so people can contribute both to designing living infrastructure and taking care of valuable living resources.

¹⁰ http://www.environment.act.gov.au/_data/assets/pdf_file/0011/1170965/Canberra-Living-Infrastructure-Information-paper-2018.pdf

Comments on living infrastructure

Plant more trees to meet multiple objectives

- » We need to plant trees! Lots more trees in the city and surrounding areas. Make use of land within the ACT for carbon sequestration (not outside of ACT).
- » Ensure sufficient tree shade.
- » More native plants.

Take an informed and strategic approach

- » We need continuous planting for regeneration and distribution of age profile of trees.
- » Address 'threats' to living infrastructure - To retain significant vegetation and critical ecosystems will require strategic landscape planning and management. This does mean mapping the living infrastructure, ensuring there is connectivity, monitoring its quality and taking restorative or remedial action.
- » The ratio of green space to buildings in the urban environment needs to be addressed if we are to maximise the benefits of street trees, parks, waterways and other natural spaces.
- » Add consideration of trees to building code.

Involve the community

- » Free trees and shrubs should be reinstated.
- » Increase opportunity for people to participate in helping maintain parks and trees.
- » Community preferences are critically important, nothing will work without significant support. We need to garner support not by telling people what to think, but by engaging them in the broader mission of how to manage greenspace/urban forest/heat in a drying and warming climate.
- » Promote volunteering and philanthropy to help look after the city we want

Connect plants and buildings

- » Increase plant biodiversity and cooling effects for all buildings by installing vertical gardens and green roofs.
- » Beehives on top of apartments.

Address water issues

- » Build in-situ/suburb level water collection for street-tree watering.
- » Changed contours to ground surface to slow the movement of water and aid water retention in the landscape.

Avoid deforestation

- » Densification is important but needs to be done carefully to preserve greenery and biodiversity.
- » There is insufficient space for trees in current approach to development.
- » Stop totally clearing residential blocks.

Address heat risk

- » Tree corridors through hot spots (grasslands) along active travel paths.
- » Space for street trees to mitigate the heating effect of asphalt and concrete.

Improve health of living infrastructure

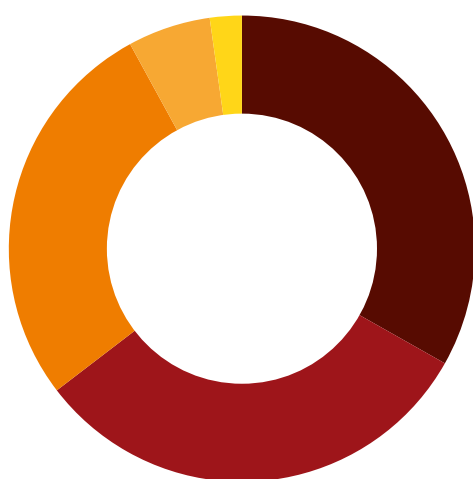
- » Living infrastructure has multiple benefits and has a great cost/benefit ratio while also producing a more liveable city that people will want to be a part of. Living infrastructure needs to be carefully planned and have ongoing maintenance and care or it will wither and die. There is no point planting anything unless you are going to look after it and ensure it survives to actually become living infrastructure.
- » Develop and implement an urban forest strategy for Canberra.



5.4 WASTE

The Government released a Waste Feasibility Study in May 2018, including a Roadmap of initiatives designed to deliver incremental gains in resource recovery from the existing level of around 70% towards 90%. The 'ACT Waste Management Strategy 2011-2025', set the ambitious target of diverting 90% of waste from landfill by 2025 and achieving a carbon neutral waste sector by 2020.¹¹

Figure 7: Grouped ideas on waste



WASTE

-75 Divert organic waste from landfill
-71 Divert inorganic waste from landfill by avoidance
-62 Divert inorganic waste from landfill by recycling, up-cycling, re-use etc
-13 Improve waste policy
-5 Beneficially manage landfill waste

The waste management hierarchy classifies waste management strategies according to their order of importance and is the cornerstone of most waste minimisation strategies.

The aim of the waste hierarchy is to extract the maximum practical benefits from products while generating the minimum amount of waste. The hierarchy focuses on waste avoidance first, then recycling and recovering and finally safe disposal.

Actions that people suggested included more composting, green bins, recycling options as well as using own shopping bags. They also suggested ideas about reducing consumption, packaging, litter, organics in landfills and more.

Figure 7 shows the range of suggestions received on waste matters. A total of 226 suggestions were received with over 92% focused on the top end of the waste hierarchy, including diverting organic waste from landfill for beneficial re-use, diverting inorganic waste from landfill by avoiding its generation in the first place, and diverting inorganic waste from landfill by recycling.

The box on the next page quotes some of the suggestions that were made about addressing waste issues to achieve climate change emission reduction targets.

¹¹ https://yoursay.act.gov.au/application/files/3015/2582/3028/WFS_overview.PDF

Comments on waste

Divert organic material from landfill

- » Provide incentives for households to reduce organic food waste - local flexibility for different living circumstances (e.g. apartments).
- » I would suggest place a ban on food wastages by supermarkets and groceries.

Divert inorganic waste from landfill by avoidance

- » Phase out commercial use of plastic containers for milk and other drinks. Tax all other products commercially sold in plastic containers – introduce this in a phased way to enable consumers to adapt.
- » Help to lower our emissions profile by reducing our psychological dependence on material possession.
- » We need to understand and shift community attitudes to waste and consumerism e.g. there is high consumerism and wasteful behaviour because waste disposal is convenient and cheap and reusing and recycling is not the easiest option. People are distanced from the impacts of the waste they generate.

Divert inorganic waste from landfill by recycling, up-cycling, re-use etc

- » Investigate and implement options for re-manufacturing / up-cycling of plastic waste.
- » Incentivising small acts e.g. collecting rubbish/ recycling through financial incentives. These could be undertaken in partnership with local businesses. Application based games could also be used as a way of creating incentives.

Improve waste policy

- » Improve waste data collection and sharing.
- » We need to take a life cycle approach to waste management, aiming for a circular economy and zero waste and regulating waste producers (e.g. manufacturers) to have responsibility for disposal of products at end-of-life.
- » We need to re-define waste as a resource e.g. waste as a “nutrient stream”.

Beneficially manage landfill waste

- » Instead of creating electricity from internal combustion generation (i.e. Mugga Lane), use steam-methane reformation or partial oxidation in order to produce hydrogen, which can, in turn, be used in hydrogen fuel cells to produce virtually zero emissions electricity.
- » Soft plastic food packaging as an alternative energy source.

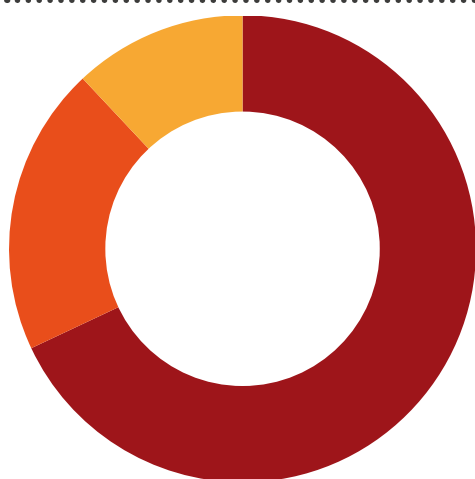




5.5 PLANNING

Several elements of ACT planning and housing are being reviewed and further developed concurrent to the Climate Strategy. These include the ACT Planning Strategy Refresh, Housing Choices, and the ACT Housing Strategy. Being a planned city, Canberra has key strengths that place it in an excellent position to respond to the challenges facing all Australian cities. Canberra is also at the centre of a region that has many natural and cultural advantages – coastal and mountain landscapes, a variety of produce including cool climate wines, and historic towns and villages.

Figure 8: Grouped ideas on planning



PLANNING

-51 Improve suburb design
-15 Make the ACT a sustainable territory
-9 Address climate related risks

Working with our neighbours, Canberra and the region could take a lead in developing a clean economy, sustainably managing urban settlement and protecting biodiversity.¹²

Actions that were commonly suggested for tackling climate change included that planning could be improved by better incorporating sustainability principles and requirements into the *Planning and Development Act 2007* and through a stronger compliance framework. They also suggested increasing the ratio of green space to built areas, especially in high density areas. Many people supported higher density dwellings, in-fill in existing suburbs and mixed density developments with caveats that these should be integrated with a range of green spaces including community gardens, parks, wider verges, forests and corridors between reserves.

Several people suggested a need to reduce the net loss of green space. There were also some suggestions to reduce population growth, as well as developments that create heat islands, bushfire risks and various impacts of cars.

Figure 8 shows grouped ideas about planning matters. This covers a total of 75 suggestions on how strategic planning could be applied to help deliver the climate strategy. Most of the comments were about improving planning at the suburb scale. Others focused on using planning to make the ACT a sustainable city, and to address climate related risks. The box on the next page contains some representative suggestions on planning.

¹² https://www.planning.act.gov.au/_data/assets/pdf_file/0008/895076/2012_Planning_Strategy.pdf

Suggestions about planning

Improve suburb design

- » Ensure planning for new developments addresses amenity (space for trees) and the need to reduce heat stress as a top priority (open spaces, cool surfaces, efficient buildings).
- » Regulate and keep as low as possible the house and road hard surface ratio to plants, trees and ground surface ratio.
- » Overcome the current disconnect between planning, dense high-rise apartment construction, infrastructure and jobs.
- » New neighbourhoods and developments should be modelled on the older suburbs – with slightly higher density housing as needed (town houses, 2 – 4 storey homes & units, apartment houses, but ensuring that new buildings are built to the Passivhaus™ standard as New York City is now doing. Homes should have green roofs, and with 1 – 2m deep underground watering systems along streets to nourish the development of broad-leaf deciduous trees to provide cooling in summer and warmth from the sun in the winter.
- » Minimise concrete and asphalt covering the ground in roads, tramways and sidewalks.
- » No new suburbs...more infill throughout Canberra.

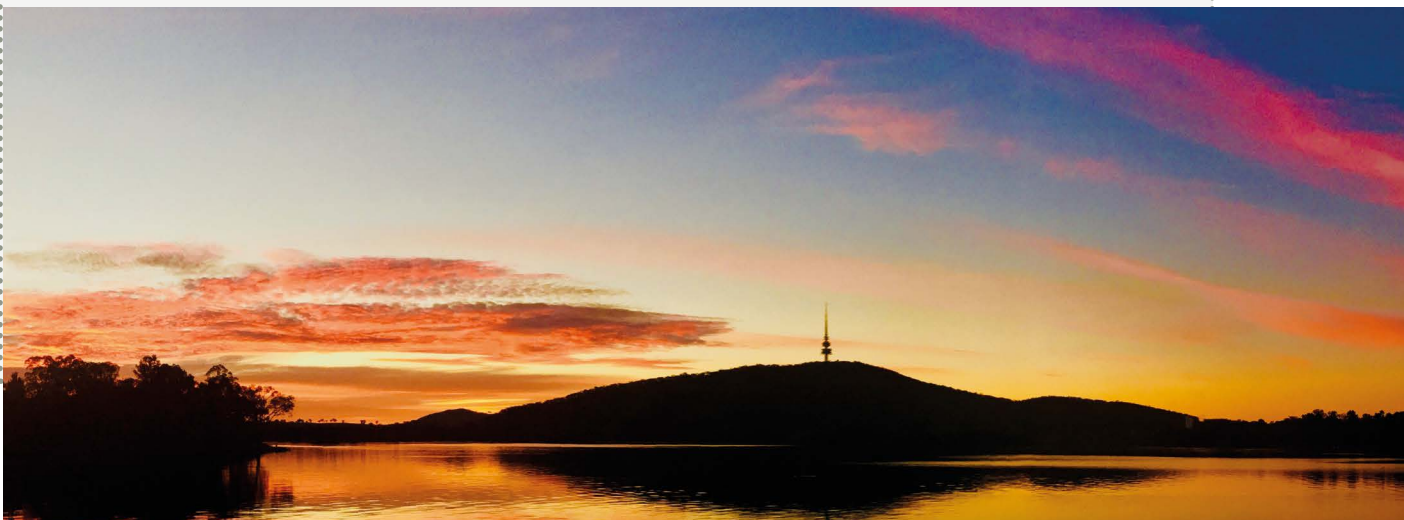
Make the ACT a sustainable territory

- » Support the following actions:
 - planning for more compact urban form with shorter distances between destinations
 - continuing development of active travel options
 - extending the light rail network.
- » We need to make better use of space in the built environment – more parks and playgrounds to support transition to higher density living.

Address climate related risks

- » Developments are short term money making ventures, but if we could all see the life cycle cost of that development at development application stage, would be different.
- » Increasing the number of land conservation projects, including the planting of trees and the erecting of nature parks, especially in the development of new suburbs and roadways, will also provide an effort to ease the greenhouse gas emissions created through the progress of these developments.

Photo competition entry by Sam Heinsohn





5.6 INDUSTRY AND ECONOMY

We received 66 comments about industry and the economy. Figure 9 shows how these suggestions were grouped into related ideas and the box on the next page contains quotes some of the comments. More than half of all comments on industry and economy focused on making and keeping the ACT economically competitive. Others emphasised adopting a sustainable economic approach and improving sustainability in the business sector.

Figure 9: Grouped ideas on industry and economy



INDUSTRY AND ECONOMY

-37 Make Canberra economically competitive
-16 Adopt a sustainable economic approach
-13 Improve sustainability

Comments on industry and economy

Make Canberra economically competitive

- » 'Knowledge economy': leverage ACT leadership to foster export expertise/ create jobs.
- » Consider economic restructuring and provide upfront opportunities for reskilling of mechanic trades [to service electric vehicles].
- » Implement changes which will enhance job creation to support the economy.
- » Important to be consistent with other jurisdictions in regulations for business...

Adopt a sustainable economic approach

- » There is room for education from the government regarding commercial sector installation of solar panels. Could be installed for commercial reasons, but it is not happening.
- » One way for people to become more involved is for them to invest directly or via their super funds in infrastructure that will help the community move to zero emissions. One way of doing this is via co-operatives.
- » Get businesses to switch everything off over the weekend.

Improve sustainability

- » Ongoing community and business sector education is needed: make it funky and fun and bring ads about climate change and need to lower emissions and zero waste strategies at cinemas (before the main movie starts) and public places and show the cost benefits and benefits to ACT community & climate & environment for this and future generations. Provide further opportunities of community engagement with the Climate change strategy, with directions for a sustainable Zero Waste & Zero Emissions strategy.
- » Enable residents to buy shares in ACT Government carbon-reduction schemes. I don't have the space to install more solar cells or batteries, but I have the money. I'd like to put it towards bigger solar farms and energy storage.
- » Government should support technology that reduces emissions at lowest community cost and minimises reliability impacts.
- » Government to provide start-up investment in solar products to kick-start projects that need investment to get off the ground, but will be profitable once established.





Climate change photo competition entry by Richie Southerton - Highly commended.

CROSS-CUTTING THEMES

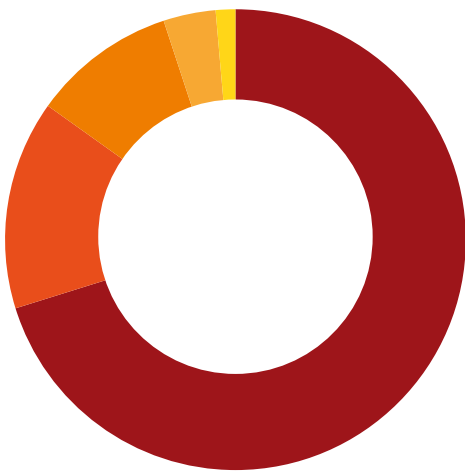
So far this engagement report has focused on suggestions and ideas in relation to a set of sectoral topics that reflect government structures and processes related to climate change policy. This section takes a cross-cutting look at some key themes that emerge across sectors. These include general, process, supporting and challenging themes. This section therefore reiterates the importance of Government taking a whole-of-government approach to tackling climate change.

It also highlights that the ideas Government has received from the community often have policy implications for more than one sector.

GENERAL

General suggestions did not focus on specific sectors nor were they about strategic approaches to developing the climate strategy. These suggestions focused more on general support for the overall concept of the climate strategy and for the broad elements that people considered essential for achieving it.

Figure 10: Grouped general comments



GENERAL

-153 Make the ACT a sustainable territory
-32 Target scope 3 emissions
-22 Ensure integrity in sustainability claims
-8 International tackling of climate change
-3 Encourage sustainable industries

Figure 12 shows how the general suggestions were grouped into five broad general ideas. Most were a general endorsement for the proposition to make the ACT a sustainable territory. Many comments addressed scope 3 emissions, which are indirect emissions not included in the greenhouse gas inventory of a particular jurisdiction because they are reported by another jurisdiction either upstream or downstream in the economy. Examples include emissions from aviation fuels used by aeroplanes traveling to and from Canberra but which are not refuelled in the Territory; and emissions from building materials manufactured outside of the ACT. Other comments focused on the integrity of sustainability claims, international linkages and encouraging sustainable industries.

The box on the next page shows some quotes on general cross-cutting themes.



Comments on general issues

Make the ACT a sustainable territory

- » Consider social impacts across diverse demographics (e.g. active travel and public transport measures are not an option for everyone or even everywhere across the city).
- » Perhaps we should aim for net negative emissions?
- » Grow own food.
- » Not just emissions but broader ecological footprint should be the ultimate focus of our efforts.
- » We support the ACT Government's ongoing program to reduce its own emissions.

Target scope 3 emissions

- » Consider embodied emissions - Whilst energy and transport make up the largest component of emissions in the ACT, we need to decide on the boundaries we're using to consider our carbon emissions. For the ACT, which is expanding quickly almost at the rate of a developing country, it is also important to look at the production of materials for the building sector and infrastructure building as they are all emitting carbon somewhere else.
- » Address scope 3 emissions, including reporting on them as ACT citizens clearly care about them.

Ensure integrity in sustainability claims

- » The ACT is in a privileged position as we don't have emissions intensive industries. This means we are importing emissions intensive products but are not reporting the embedded emissions in these e.g. fertiliser used in growing food, cement and other materials used in buildings). Do we need to include these in reporting? How can we encourage low emissions manufacturing?
- » Do not purchase carbon offsets to achieve emissions reduction targets.

Tackle climate change internationally

- » Measurement and reporting of actual emissions should be consistent with the latest national and international accounting standards and best practice.
- » Support the ACT government continuing and extending its strong local, national and international leadership role on action to achieve zero net emissions.

Encourage sustainable industries

- » Promote more R&D as an investment in the local economy.
- » Develop Canberra into a hub for innovative technology.



Community and stakeholder roundtable event, 1 May 2017.

PROCESSES

Comments about processes did not focus on a particular topic, sector or theme, but on the ways in which government can deliver integrated, cost-effective policies and programs towards preferred climate change outcomes. Government has demonstrated a commitment to inclusive, responsive governance through initiatives such as YourSay¹³, Citizens' juries¹⁴ and other processes as well as through the climate strategy engagement.

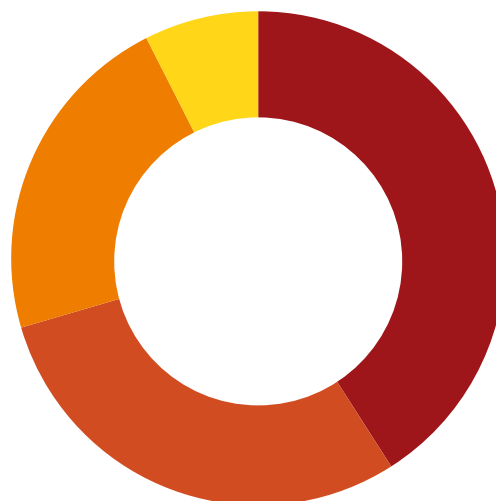
We received 254 suggestions about processes that the ACT Government could follow in delivering net zero emissions by 2045. Figure 13 shows how these comments were grouped into four main categories of ideas. Most of the comments were about engaging the community in strategy development. Many also encouraged and applauded the specific processes that have been used to develop the climate strategy and urged their continuation. Others suggested further work to develop more emission reduction targets and some other strategic processes.

The box on the next page shows quotes some of the suggestions made about processes to follow for the climate strategy.

¹³ <https://www.yoursay.act.gov.au/about>

¹⁴ <https://www.yoursay.act.gov.au/ctp>

Figure 11: Grouped ideas on processes to follow



PROCESSES TO FOLLOW

-104 Engage the community in strategy development
-75 Develop the new climate change strategy
-56 Further develop targets for emissions reductions
-19 Other strategic processes for sustainability

Comments on processes to follow

Engage the community in strategy development

- » Need to bring everyone along on this journey, not just those who support the idea of net zero emissions. Identify who may oppose and talk to them.
- » Further mitigation will require significant behaviour change and is a key area where community groups can exert influence and provide support.
- » Consider how to engage with vulnerable and disadvantaged members of the community.
- » Consider social impacts across diverse demographics (e.g. active travel and public transport measures are not an option for everyone or even everywhere across the city).
- » Establish a backbone organisation to create broader engagement and participation in climate policy objectives throughout the ACT community.
- » Knowledge dissemination to our community by government of the amount of CO₂ emissions created by different human behaviours, eg average yearly vehicle use.
- » Need better information to support us making better choices. E.g. most people don't know about embedded energy in materials etc.

- » Effective engagement requires not just bombarding with information, but also myth-busting, clear communication, focus on shifting values.

Develop the new climate strategy

- » We need to develop a 'narrative' and story which captures the future that we want to see and helps to bring community along on the journey and build and collective vision.
- » Promote individual responsibility and accountability.
- » Need to change the language from combating climate change to focusing on the positive outcomes. It would be better if we saw community expenditure of funds and effort as an investment.
- » We would like to see Key Performance Indicators and milestones around program rollout.

Further develop targets for emission reductions

- » Start telling the truth [about climate change] - it is getting worse and our current actions are far from enough.
- » Consider declaring scope 3 emissions reductions as a principle to adopt.

Other strategic processes for sustainability

- » Establish and provide resources to a broadly representative community council (business, social services, environmental organisations, research organisations, unions).
- » Prepare strategy with a positive spin. Highlight opportunities for small businesses.
- » Stop anything contrary to achieving the overarching goal of reducing emissions.

Climate change photo competition entry by Meg Thotthadi





Climate change photo competition entry by Anouk Schumann-Morin

WHAT TO SUPPORT

Across all contributions to the climate strategy was a consistent theme that Government needs to support certain approaches, people and entities. Quotes related to some commonly mentioned targets are in the box on the following page.

Many people encouraged the Government to support a strategic transition to net zero emissions. These comments urged a well-informed and careful approach to achieving net zero emissions. They emphasised risks associated with hasty or poorly conceived actions, and the importance of information, advice and well-planned initiatives. Counterpoints to a strategic transition are also addressed in the next section on challenges to dominant ideas.

Over 30 comments were received on the need to support vulnerable people. This category was frequently articulated separately for the elderly, the young and people with disabilities especially if they live in outer suburbs, rental households or other less advantaged places.

Separately, rental properties were highlighted as needing particular assistance.

The split incentives problem is key to these issues, in which those responsible for paying energy bills are not the same entities as the landlords who are responsible for capital investments in household thermal performance and heating systems.

Body corporates were identified as needing special attention because many of the main options to approach zero emissions are difficult to apply in apartments and other shared buildings. Solar panels, composting and electric vehicle charging stations are all examples of emissions-reducing options that are usually unavailable when a body corporate manages a building.

It is also worth mentioning behaviour change as a cross-cutting theme applying to all of the broad sectors. The suggestions emphasised that behaviour change is a negotiated process, and not something that can be successfully imposed by Government. When Canberrans are asked, involved, engaged and supported to take action for climate change they can be powerful actors in support of the targets. This is especially the case when actions to reduce emissions also help to improve quality of life, property values, business profitability and community opportunities.

Comments on what needs support

Strategic transition

- » Continue to encourage the uptake of electric vehicles, but keep in mind it is a long-term task. For example, the Shanghai case study, in terms of incentivising hybrid cars and electric cars, shows that the rebate policy has been set to receive a boost in the market, but the technological barriers might still be a major challenge for the future transition.
- » Plan ahead for renewable energy needs as a result of electrifying transport.
- » Establish an information and incentive program to support the transition by existing households from gas to electricity. Both residential and business sectors may face replacement capital costs that may not otherwise be recouped in a reasonable time. Independent advice and financial incentives and information ‘calculators’ (“what’s in it for me”) could assist.

Vulnerable

- » Design a bus fare scheme that considers social equity, that the most marginalised people are likely to live the farthest away from work and have to pay for the cost of long bus trips.
- » We support cost of climate change actions to be coupled with cost saving measures and support for the most vulnerable in the community.

Elderly

- » Active travel will not work for everyone e.g. elderly or less able, so need to look at multiple solutions.
- » Consider having non-peak hour flexibility to drop people off outside their houses when carrying shopping from local shopping centres or when it’s very hot and the person is elderly or disabled; maybe an app could be used to alert the driver to this need.

Children

- » More kids bike paths connecting to Civic and other shopping centres.

Rental properties

- » It would be helpful for the ACT Government to provide an incentive for owners of rental properties to invest in energy saving measures, such as improved insulation, in cases where the direct beneficiaries are their tenants.

Body corporates

- » Our apartment complex is considering getting communal solar panels to power communal light, however it is difficult to find information on this. Some information on the steps required for this that could be used in discussions with Strata companies would be really useful.
- » In existing apartment buildings, remove the power of bodies corporate to prevent owners from installing charging facilities.
- » Help the body corporates in charge of apartments etc. to adopt policies that are environmentally friendly; incentives/legislative support for body corporates to install/manage solar energy generation with electricity rebates to unit owners.

Behaviour change

- » A lot more work needs to be done in examining the psychology of transport behaviour, particularly the reasons why people won’t get out of their cars.
- » Provide Government sponsored workshops and bulk buying to facilitate DIY and sponsored retrofitting of home and building insulation: e.g. double glazing; insulation; solar panels; green roofs.
- » Energy appliance choices are influenced by tradespeople. We need more training for tradespeople to encourage sustainable choices.

CHALLENGES TO DOMINANT IDEAS

Although no suggestions were received in opposition to the proposed net zero emissions target, or a strong climate strategy, some people urged caution in relation to dominant ideas being developed for achieving the targets. This section presents some of the suggestions which challenged the dominant ideas.

While no-one directly opposed a transition off stationary gas, several submissions expressed concern that a hasty transition could create new problems for energy reliability, affordability and availability. Similarly, a rapid transition off petrol vehicles was identified as a cause for concern because of its possible impact on the electricity grid, and the potential for wasteful turnover of cars before their end of life.

Offsetting is a proposed option for achieving net zero emissions when emissions are still being generated, and works through the purchase and retirement of carbon credits earned by initiatives that reduce emissions elsewhere. Many people have expressed opposition to off-setting, while only a few identify it as a positive solution.

There were some other suggestions emphasising caution. One urged reconsideration of the population growth outlook, and another noted bushfire risks associated with increasing living infrastructure.

Quotes that challenged dominant themes are presented in Box 10.

Suggestions challenging dominant ideas

Transition off stationary gas

- » Address challenges in transitioning from gas, such as the impact of stranded assets and lack of understanding of how distribution network costs contribute to electricity bills.
- » Develop a program to support the transition of households from gas to electricity, with funding directed to the replacement of older heaters and to households that are least able to fund their own transition, with a requirement that the replacement appliances meet defined energy efficiency criteria.

Transition off petrol vehicles

- » We also need to be considering now what to do with all the petrol vehicles that will eventually become obsolete. Cars should be considered not as a waste stream but as a resource stream, but there needs to be a clear strategy for people considering replacing their petrol cars with electric. Can vehicles be converted? Could the ACT subsidise this?
- » Sceptical on EVs due to grid demand and cost.
- » Need to make sure that buying an electric vehicle will have overall lower environmental impacts than continuing to use existing vehicles (whole of life impacts).
- » If hydrogen is used, only use as a temporary solution.

» Offsetting

- » No carbon offsets as it only moves a problem elsewhere.
- » Make use of land within the ACT for carbon sequestration (not outside of ACT).

Population growth

- » Please consider not growing the city at the current excessive growth rate. More people means inevitably more emissions from multiple areas (transport / construction / food etc etc).

Living infrastructure

- » Bushfire considerations.

Targets

- » Yeah like the ACT is going to make a difference to climate change! Not even a drop in the ocean compared to the CO₂ output on a global scale. You blokes are dreaming (Facebook comment).
- » Merry Christmas EPSDD, enjoy the break. I don't agree with your climate change philosophy, let's keep that out of the birth of the baby Jesus ok guys.. Amen.. PS I am not deeply religious but I am an ACT ratepayer (Facebook comment).



WHAT'S NEXT

Taken together, the contributions made during the community engagement period demonstrate the complexity of acting on climate change – both in reducing greenhouse gas emissions and in increasing community resilience to impacts of climate change. Many potential areas for action are interweaved into aspects of the economy and everyday life. This also means that areas for action are embedded across different parts of government, which serve to meet many outcomes for the ACT separate to action on climate change. Integration of climate action and other goals is critical, but also difficult.

While developing the Climate Strategy, the Government continues to integrate climate action goals into other areas of policy, particularly planning and transport, which are critical to how our city works for its citizens, business and community. It is timely that several core elements of government policy are being renewed at present. It provides opportunity for multi-faceted dialogue with the community and more informed and integrated government policy.

The ideas put forward during the community engagement period and covered in this report are being considered in the development of the Climate Strategy, and being provided to related policy units. Community engagement will be a feature of ongoing climate action in the ACT.

