

Contents

Biodiversity Conservation – protecting our unique ecological communities and the Bush Capital.....	4
Biodiversity protection is fundamental environment protection	4
Planning for biodiversity protection	4
Biodiversity Management to implement good policy	5
Climate Change – a regional, national and global challenge	6
Strengthen climate change policy targets	6
Government Divestment from Fossil Fuel investments	6
Update climate change implementation policy	7
Additional greenhouse accounting to tackle consumption	7
Progress good governance for climate change	7
Show leadership on climate change.....	7
Climate change adaptation throughout Government operations	7
Planning – the right things in the right places.....	8
Implement key measures of the Planning Strategy	8
Building Standards – improve and apply	9
Food Policy for a resilient future	9
Community Input into Planning Processes	9
Urban form for high-quality for living next to with nature.....	9
Urban Planning for our transport future.....	9
Transport – connecting people and places.....	10
Develop Integrated Transport Plan where living without a car is a viable option.....	11
Achieve mode shift targets	11
Public transport needs to be integrated and expanded.....	11
Active transport for a healthy community and a healthy city.....	11
Cars creating less emissions and carrying more passengers per vehicle.....	11
Support people to make the change.....	12
Sustainable transport to reduce greenhouse emissions	12
Connecting Canberra to rest of the world	12
Waste and resource management – being efficient through closed-looped material systems	13
Apply waste hierarchy.....	13
No Waste Policy	13
Reduce Waste Generation	14
Reuse and Recycling.....	14
Reduce Waste to Landfill.....	14
Water conservation – smart use of a scarce resource	15
ACT Water Policy – reduce consumption, reuse and conserve.....	15
Water Infrastructure to improve water quality.....	15
Water Sensitive Urban Design for a more liveable and sustainable city.....	15
Stormwater Management to recognise value and improve quality	15
Water Recycling – Greywater for reuse including for gardens	16
Water Efficiency – system changes supporting community responsibilities.....	16
Towards a smarter, sustainable Canberra – governance for sustainability	17
Government policy should achieve sustainability.....	17
Community consultation and engagement are key to positive outcomes.....	17

Executive Summary

Among the ACT's greatest privileges is our wonderful natural environment which provides our residents with access to natural areas, generates fresh air and clean water and continues to provide scientific surprises and puzzles.

Canberra is the national capital of Australia and is also known as the Bush Capital, perhaps derisive in its origins but now a term of pride for its residents. Walter Burley Griffin's design for the city made it a city within a landscape – a place within a larger setting. Our responsibility as national capital includes looking after our natural environment with some of the best remaining examples of the grassy woodland habitats that once dominated south-eastern Australia.

At the same time Canberra sits heavily within this environment. We are pushing the city out into these natural spaces not only sitting on top of natural habitats but also degrading them at the edges with the impacts of escaped domestic plants and animals, noise and light disturbance, water and air pollution, litter and dumping, stormwater erosion and erosion from some forms of recreation.

While we can do something for the environment as individuals, including through advocating for changes, the role of elected governments is primary as managers of resources, enablers of activities and as a vehicle for expressing and maintaining community values for appreciation and protection of the environment.

Over the last ten years the ACT has lost over 350 hectares of red gum yellow-box grassy woodland and the area and quality of natural temperate grassland has diminished. These are areas that are expensive to restore, if it is even possible, yet they provide support to an array of locally or nationally threatened species.

Our waste generation per capita is among the highest in the country and our waste issues are pushing us further into natural habitats or to consider expensive processing facilities.

There is some good news on our greenhouse gas emissions – we peaked our per capita emissions in 2005-06 at almost 13 tonnes CO₂-e per person – and our existing greenhouse gas emission and renewable energy targets put us at the head of the pack in Australia and in many world comparisons. However, the existing ACT targets are not good enough to meet the global commitment made in Paris 2015 to keep global temperature rises below 2° Celsius with a new aspirational target of 1.5° Celsius on the agenda.

Canberra's population is projected to grow from just under 400,000 in 2016 to 500,000 in 2032 – an increase of 20% in sixteen years. We need to take steps now to manage our impact on the environment and build for a future where we have a benign or even enhancing impact on our natural surroundings.

The Conservation Council ACT Region has been protecting the environmental interests of Canberra and the surrounding region since 1979 and we have set out some recommendations which aim to set directions for the ACT Government to reduce environmental impacts over the next four years.

We have identified potential initiatives in the key areas of our work:

- Biodiversity Conservation – protecting our unique ecological communities and the Bush Capital
- Climate Change – a regional, national and global challenge
- Planning – the right things in the right places
- Transport – connecting people and places
- Waste – being efficient through closed-loop systems
- Water – smart use of a scarce resource
- Governance – for a Smarter, Sustainable Canberra

We have identified three major issues as highlights which if implemented would transform Canberra into a truly world class capital city and ensure by 2050 we do have a vibrant, liveable, compact and ecologically sustainable city.

No more loss of our nationally significant and local critically endangered ecological communities: We must manage and protect our biodiversity so that there is no more loss of existing habitat; no further species become locally extinct.

Canberra zero net emissions by 2040: Maintain leadership on climate change by continuing to meet stronger greenhouse gas emission reduction targets while also adapting for climate change.

Smart and sensitive urban infill: Develop a more compact city that lives within its environmental means while also being liveable for all and providing a high level of human amenity and a place where natural and cultural heritage are respected and protected. We support environmental initiatives through urban planning which look after people so that they can live without having to impact on the natural environment.

While we have tried to be comprehensive we acknowledge that there is always more that can be done and that not all issues have been listed or completely covered.

The 2016 ACT election is your chance to show support for the environment.

Authorised: Larry O'Loughlin, Executive Director, 14/26 Barry Drive Canberra, Canberra, ACT, 2601, May 2016

Biodiversity Conservation – protecting our unique ecological communities and the Bush Capital

Context

About 99% of natural grassland and 95% of Yellow Box-Red Gum Grassy Woodland have been destroyed nationally, for cropping, urban expansion and infrastructure. Large patches in good condition are rare beyond the ACT. The remaining ACT patches have very high regional and national conservation significance, as they protect a range of fauna and flora, many of which are also threatened with extinction, and provide important links across the landscape. These ecological communities have such high environmental value that they should be retained as part of the conservation and rural estate and managed to protect and enhance their ecological value, as is recognised in their national and local listing as threatened ecosystems.

Over the last ten years over 350 hectares of Yellow Box-Red Gum Grassy Woodlands have been cleared in the ACT and the area and quality of natural temperate grassland has diminished due to urban development. We must protect and enhance what remains.

In November 2014 a new *Nature Conservation Act* was introduced with an ecosystem approach focus central to its operations. An Integrated Conservation Agency will become operational 1 July 2016. Both these measures are welcomed.

It is vital that these changes are appropriately resourced and structured to ensure we can protect, manage and enhance our beautiful and nationally significant critically endangered ecological communities, whether they are in the conservation estate, on rural lands, roadsides or remnants within the urban area.

Biodiversity protection is fundamental environment protection

No more net loss: no development of threatened species habitat and endangered ecological communities as well as allowing for adequate buffers and habitat connectivity

Mature trees: ensure protection of mature trees, many of which are over 200 years old, noting loss of these trees cannot be offset

Central Molonglo: outline and implement measures to ensure the land is protected in perpetuity, as previously agreed by the Government

Biodiversity on Private (leased) Land: facilitate by supporting perpetual conservation covenants, stewardship agreements and financial incentives to all land covered by such agreements

Commonwealth environmental responsibilities: no transfer of Commonwealth environmental responsibilities to the ACT government.

Buffer areas: identify remnant areas of woodland and grassland within and adjacent to the urban area and manage to conserve their ecological values. These areas are particularly susceptible to weed invasion, inappropriate use and poor management practices leading to degradation, but provide roles as stepping-stones and local icons.

Planning for biodiversity protection

- **Strategic forward planning:** for all future urban development, including strategic environmental assessments (not piecemeal site by site) identifying what needs to be enhanced and protected before development plans progress
- **Strategic Conservation Estate:** identify, protect and enhance areas of threatened species habitat and endangered ecological communities across the ACT
- **Strategic Biodiversity Offset Plan:** identify areas for 'advanced' biodiversity offset management
- **Hills, Ridges and Buffers:** ensure are under some form of biodiversity management program

- **Community Consultation Model:** develop a community consultation model which is transparent, open and effective and encourages interaction between conservationists, experts, Government officials and the community (e.g. Bush on the Boundary model)
- **Living next to nature community engagement:** ongoing funded program for all of Canberra on importance of our bush capital with emphasis on new “greenfield” suburbs
- **Cats: introduce a forward declaration of all ACT being cat containment by 2025;** in interim ensure funded compliance for existing cat containment areas and ongoing community education on the need for cat containment
- **Bushfire Management:** focus on bushfire mitigation measures which have a demonstrated reduction of risk
- **Urban Edge Principles:** incorporate into planning processes and include as conditions of development approval
- **Rivers and river corridors:** protect and enhance all river and creek corridors for biodiversity connectivity balanced with human amenity

Biodiversity Management to implement good policy

- **Measures to protect mature trees:** including protection for rural paddock trees and isolated urban trees by formal listing as protected
- **Biodiversity Budget:** invest in nature by increasing public expenditure on nature conservation, restoration, reserve management and public education annually over next four years with an emphasis on adaptive management
- **Biodiversity Monitoring:** provide specific budget allocation for biodiversity monitoring and reporting
- **Biodiversity Reporting:** strategic and accountability indicators for biodiversity outcomes included in appropriate corporate documents including in the ACT Budget papers
- **Offsets:** ensure annual public reporting of biodiversity outcomes of offset sites, offset management plans are subject to formal public consultation and the offset calculator reports are included on the public biodiversity offsets register
- **Weeds and Pests:** ensure secure, predictable recurrent funding for weed and pest management in order of \$3 million per year (\$2.4 million weeds, \$600,000 animal pests)
- **African Lovegrass:** develop and implement a strategy for the long-term containment of African Lovegrass, which is both a very high risk to biodiversity and wildfire management.
- **Nature Reserves:** prepare an annual State of our Reserves report linked to the biodiversity monitoring program
- **Recognise and support Parkcare/Landcare volunteers:** build and expand existing base
- **Bush Management Teams:** funding mechanisms developed to establish Strategic Bush Management Teams across the ACT
- **Climate change conservation planning:** support directorates, NGOs and community in transformation of conservation approaches required to respond to climate change. Ensure ACT conservation, parks and reserve management for climate change are included in the full climate change adaptation and mitigation policy.
- **Connectivity for Climate Change:** enhance natural resilience to climate change by supporting large-scale conservation initiatives to protect and restore natural connectivity in the landscape.
- **Recreation Plan:** develop as an urgent priority a Territory Recreation Plan which protects key reserves and biodiversity while promoting active healthy lifestyle for the ACT’s citizens.
- **Management Plan for off-reserve areas of ecological significance:** woodlands, grasslands and threatened species habitat on unleased off-reserve land (including urban open space, roadsides, travelling stock reserves) should have a management plan.

Climate Change – a regional, national and global challenge

Context

Climate change is happening faster than expected, with 2015 the hottest year on record, rising ocean temperatures and an increase in extreme weather events. Climate change solutions have never been more urgent. The ACT must continue its leadership role reducing emissions, and start adaptation work to prepare our community for the impacts of climate change already embedded by previous emissions.

The ACT has been a leader in climate change policy. Our *Climate Change and Greenhouse Reduction Act 2010* requires a 40% reduction in our greenhouse gas emissions by 2020 on 1990 levels as well as being zero net emissions by 2060. The ACT Government has committed to be carbon neutral in its own operations by 2020. We have a 100% renewable energy target for 2020. We have the *Energy Efficiency (Cost of Living) Improvement Act 2012*.

And it is working. Our emissions per person peaked in 2005-06 and have declined since, despite a small rise in 2013-14¹. Draft greenhouse inventories are now available three months (previously two years) from the end of the financial year, to better track progress.

The Conservation Council supports these targets as a step towards needed emissions reductions. Global reductions of this size are necessary by 2020 if we are to keep global temperature increases less than 2 degrees and limit the impacts of climate change. The science is now indicating we need to keep global temperatures to less than 1.5 degrees and the COP21 Paris Agreement agreed to “pursuing efforts to limit the temperature increase to 1.5 °C above pre-industrial levels.”²

The ACT must continue its leadership role; meeting a 1.5-degree goal will require deeper emissions cuts, faster. The ACT is also facing the impacts of a changing climate and must build climate change into its planning, operations and priorities across Government, as well as assist ACT communities and businesses to adapt. The Government must release a new plan to reach stronger targets to reach zero emissions by 2040 with a transitional 2030 target to reduce greenhouse gas emissions by at least 80% on 1990 levels.

Energy efficiency is the win-win option – once measures are adopted they reduce emissions and also save money in the long run. We can and must do more to improve our energy efficiency rather than just rely on 100% renewable energy.

The ACT is leading Australia on climate action, but our money is still invested in fossil fuel projects in other places. The ACT Government says it has a “gradual phase-out plan”. This is working, as in 2015 there was a decline of 50% investment in fossil fuel companies. However we need to know the next steps and have a plan to be fossil free in all investments.

Strengthen climate change policy targets

- **Zero net emissions by 2040.** Reduce emissions as fast and as far as possible then use offsets as a last resort.
- **Reduce greenhouse gas emissions by at least 80% by 2030** on 1990 levels as a transitional target to maintain momentum and to monitor progress.
- **100% renewable electricity by 2020.**

Government Divestment from Fossil Fuel investments

- **Full ACT Government divestment from fossil fuel investments by 2018**

Update climate change implementation policy

- **Release new implementation plan:** to reach stronger climate change targets, and fully resource implementation of a new plan to reach them. Implementation plan should have adequate initiatives to achieve targets with mechanism for additional measures if progress falls short of targets.
- **Address transport emissions:** All vehicles powered by 100% renewable energy by 2040.
- **Transition Canberra out of gas:** Support business and community to transition from natural gas. Remove any gas appliance installation from allowable activities under the Energy Efficiency Improvement Scheme.
- **Eliminate emissions from buildings:** complete and publish the *Pathway to Zero Emissions Buildings Policy* for residential and non-residential sectors. All new buildings to be zero net operational emissions by 2020
- **Develop policy measure for rented properties** by 2017 to increase their energy efficiency.
- **Increase energy efficiency:** Investigate the merits of a citywide energy and water retrofit as recommended by UnionsACT³ and implement if the plan is found to be effective.
- **Support community ownership in renewable energy:** enable on-bill financing for household renewables to reduce landlord/tenant split incentives, and support community renewable models like solar gardens to give households without solar access a way to generate their own energy.

Additional greenhouse accounting to tackle consumption

- **Expand Greenhouse accounting to include direct and indirect sources of greenhouse emissions:** For example, 'bottom up' footprint accounting method trialled in Zurich to test whether their '2,000 watts' or 1 tonne per person model is accurate⁴.

Progress good governance for climate change

- **Ensure climate change policies are enacted across Government:** Chief Minister to drive enforcement of climate change measurement and performance of all Government activities.
- **Community representation on ACT Climate Council:** Introduce community representatives to sit on the ACT Climate Council to ensure community views are heard.

Show leadership on climate change

- **Advocate for Federal climate policies:** including adaptation and mitigation frameworks that meet or exceed ACT ambition. Promote aviation and shipping emissions reduction in line with the 1.5-degree target.
- **Communicate climate policy locally and internationally:** Fund appropriate community based projects to communicate climate change policy objectives in both adaptation and mitigation across Canberra community. Promote ACT's achievements through international fora like UNFCCC, ICLEI zero emissions cities initiatives. Learn from countries like Bhutan and India which avoid unsustainable levels of greenhouse emissions.
- **Engage business leaders on climate change:** Engage with business community to be leaders for climate change action in the ACT.

Climate change adaptation throughout Government operations

- **Adaptation Strategies across all Government activities:** Ensure the 2016 Adaptation Strategy outlines achievable processes to mainstream climate change adaptation as holistic management required from all Government areas. Fully finance climate change adaptation.
- **Fully integrate mitigation and adaptation strategies:** Ensure findings of the 2016 Adaptation Strategy are reflected in the next climate change policy implementation plan, so that mitigation and adaptation activities are implemented in a holistic approach.
- **ACT conservation, parks and reserve management for climate change included in full climate policy:** Adaptation and mitigation activities must preserve and strengthen the natural environment to avoid unintended negative policy outcomes.

Planning – the right things in the right places

Context

Build Canberra as a compact city (current area is 814.2 km²), a liveable city enjoyed by all, a city of choice with a dynamic heart, and a place where natural and cultural heritage are respected and protected.

ACT building standards must be set to meet ACT targets for greenhouse gas emissions reduction.

The ACT should be planning for food security and food sovereignty for the longer term, to take account of the many factors that can affect supply of adequate quantities of nutritious food including population pressures, peak oil and climate change. The ACT and surrounding region have food production potential to meet the needs of the ACT, so planning should be informed by engagement with stakeholders across the region, from business and farmers to local and State governments.

The Planning Strategy adopted 26 June 2012 replaced the Canberra Spatial Plan to provide long-term planning policy and goals to promote orderly and sustainable development, consistent with the ACT's social, environmental and economic aspirations. A long-term planning strategy is required under the [Planning and Development Act 2007](#) and a review is due in 2017.

The Strategy says: It will guide the planning and development of Canberra to 'be recognised throughout the world as a truly sustainable and creative city.'

1. In 2030 Canberra will be a city that makes it easy for people to make more sustainable living choices and has the resourcefulness and capacity to manage change.
2. In 2030 Canberra will be a city where everyone can take advantage of its network of centres, open spaces and modes of travel to enjoy a sense of wellbeing and participate in a vibrant civic and cultural life.
3. In 2030 Canberra will be at the centre of an innovative, prosperous region that has established a diverse 'clean' economy and has a wide choice in jobs and lifestyles.
4. In 2030 Canberra will be the 'capital in the bush', recognised for the quality of its public places and buildings that reflect its unique climate, character and identity.
5. In 2030 Canberra will be at the centre of a region that demonstrates the benefits of good stewardship of the land, its resources and the beauty of its rivers, mountains and plains.

We support the existing Planning Strategy noting that many measures have not been implemented resulting in disjunction between the vision and aims of the Strategy and what is implemented through the sum of planning decisions. We need to **integrate** high level planning policy into operational delivery of planning.

We need a regular, independent report card on delivery of the Planning Strategy in meeting its long-term goals.

Implement key measures of the Planning Strategy

- **Key measures of the Planning Strategy needing to be implemented include:**
 - **Improve everyone's mobility** and choice of convenient travel by integrating design and investment of various networks and transport systems with the land uses they serve.
 - **Investigate a schedule of incentives** to reward residential developments that incorporate universal housing, affordable housing and environmental sustainability measures that go beyond best practice
 - **Ensure everyone has convenient access** to a range of facilities, services and opportunities for social interaction by reinforcing role of group and local centres as community hubs.

- **Value the land and natural resources of the region** by working collaboratively to manage urban growth, ensure connectivity and continuity in the natural systems and, where appropriate, conserve agriculturally productive land.

Building Standards – improve and apply

- **Energy Efficiency Ratings:** regulate to require higher EER standards for all buildings, residential and commercial, new and existing
- **Energy Efficiency:** provide advice and assistance for improving energy efficiency
- **Compliance:** Establish a compliance unit to ensure building standards and codes are met.

Food Policy for a resilient future

- **Food Council:** Support establishment of ACT Region Food Council – an independent advisory body, funded to drive a regional food plan.
- **Benchmark food production and consumption patterns in ACT and region:** Support independent body to undertake a data snapshot of our food system to further inform understanding of regional food consumption, and explore current barriers to regional food production and consumption.
- **Plan for Food Supply:** Include food supply as a fundamental planning parameter
- **Create a zoning/ planning layer within ACT Territory Plan for “urban agriculture”** for both intensive agriculture and community use: Ensure existing agricultural assets such as the Pialligo Orchards, Tharwa Valley (Paddy’s River) and the Majura Valley are maintained and protected with a master plan for agriculture.
- **Create a register of unleased public land with agriculture potential:** List areas with potential for community gardens, agriculture enterprises and other uses, and call for expressions of interest to manage this land

Community Input into Planning Processes

- **Planning Advisor:** fund community organisation to employ a community planning advisor who would look at overall planning policies as well as specific Development Applications. A key role would be to advise on best practice planning principles and policies. The advisor would coordinate community responses as well as assist in submissions to government on broad planning issues.

Urban form for high-quality for living next to with nature

- **No new green fields development:** draw a line around our urban boundary
- **Increase density through best practice infill development** that ensures a high quality of life for all residents, green infrastructure and space for nature throughout the city, and adequate services.
- **Support our bush capital** suburbs with gardens, public parks, trees and other green infrastructure. Include measures to incentivise preserving private garden space and reduce house size in total and as a % of block size.

Urban Planning for our transport future

- **Align planning and transport processes:** Ensure transport plan references planning strategy and vice versa to ensure further development in Canberra aligns the transport plan and Territory Plan and planning processes
- **Provide public transport services into all new residential** developments at the point of initial occupancy, so that public transport is available as soon as residents start to move into new developments.
- **Decrease road footprint:** Revise planning regulations and practices, to minimise the width of roads and the amount of space devoted to driveways and by providing off-street rather than on-street parking.

Transport – connecting people and places

Context

Transport is an essential part of how we live, impacting our environment in many ways. Canberra has a very high rate of car use with nearly 75% of the adult population using the car to get to work. Only 5-7% use the ACTION bus network.

The existing policy *Transport for Canberra* stimulated some important change but is yet to deliver the transport transformation Canberra needs. We will fall short of 2016 transport targets for public transport. We must do better to meet health, social inclusion, equity and environmental aims. By 2020 over 50% of our greenhouse emissions are projected to be from transport.

Since 2012 the ACT Government has progressed a parking strategy, draft low emissions vehicle strategy and educational program trials and has invested in active travel infrastructure, such as the city loop cycle path. Capital Metro has rolled out planning, tendering and approval of a consortium to build Canberra's first light rail leg as part of a whole of city network. The first stage of light rail is another element to roll out a transformative integrated transport system that delivers a shift from car dependency. The Conservation Council welcomes this investment in public transport.

However we need a have an integrated transport policy. Canberra residents should have the option to live without a car, connected to employment, services and activities including journeys to local shops, schools and services. It's time for an integrated transport plan that uses all modes to provide Canberra with environmentally sustainable, socially equitable transport to support a healthy community. The plan must have specific, measurable targets for all forms of travel that deliver a city where living without a car is a viable, attractive option for most residents.

Active travel should be a key part of the Integrated Transport Plan. There should be a place-making approach with the planning hierarchy of walking first, cycling second, public transport third and driving private vehicles last throughout the ACT, in particular within five kilometres of town and group centres.⁵

Walking infrastructure must receive adequate funding. Only two in five Canberra households have direct access to a footpath to take them to school, shops, bus stops or shared cycling/walking paths. Another two households in five have to cross a road to get to their nearest footpath. One household in five doesn't have a footpath along its street.

Active transport needs to integrate with public transport; for example, all buses and rail have capacity to carry bicycles in ways that do not deter other passenger. Transport systems need to be accessible to people with disability as well as older people and parents who have children in prams. Transport needs to address diverse communities.

Cycling and walking infrastructure should be safe, attractive, quick, convenient and maintained to the same standard as roads and should offer a choice of facility appropriate to the needs and abilities of different riders. An Integrated Transport Plan must remove barriers for people to use public transport for their entire journey, for example maximising the provision of through services and minimising use of, and wait times at interchanges between services. A holistic public transport system requires passengers to interchange between trunk and suburban routes, and adequate planning can ensure services interchange smoothly and quickly. Capital Metro plans should be revised to permit people to transfer between a bus without having to walk between bus and tram platforms and wait for up to 90 seconds at pedestrian signals.

Canberra can be connected to the world through communications technology, without the heavy environmental impacts of travel especially reliance on air travel.

Develop Integrated Transport Plan where living without a car is a viable option

- **A new Integrated Transport Plan:** based on key objectives from other core Government policy areas such as health, social inclusion and equity. Transport planning should aim to provide adequate weekday and weekend travel without the need to own a car.
- **Governance:** Transport Canberra to employ policy and implementation staff with real world expertise in similar transport change processes where significant modal shift was achieved.
- **ACT Roads:** Rename "Roads ACT" to "Streets ACT" and bring functions into Transport Canberra. Manage roads infrastructure more effectively using technology such as lane switching and traffic monitoring.
- **New transport plan to achieve mode shift:** 10.5% of journeys to work by 2020 and 16% by 2026, include modelled initiatives to achieve targets, and include annual interim targets and mechanism for additional measures if required to actually achieve targets.

Achieve mode shift targets

- **Active transport targets:** 60% of Canberrans walking, riding or using public transport to travel to work by 2030, walking 10%, cycling 30%, public transport 20%. Targets for travel to school and travel in general should also be developed. Targets should be monitored and additional initiatives developed if they are not being met.
- **Measure non-work travel:** establish a mechanism to regularly measure non-work travel.

Public transport needs to be integrated and expanded

- **Full integration between buses and light rail services:** deliver the frequency and coverage of service to enable people to rely on public transport for work and personal travel.
- **Plan service interchanges to minimise wait times** and redesign roads network to favour public transport transit times. Convert road lanes to transit lanes, wherever this will reduce public transport delays without increasing general traffic delays.
- **Adequate funding for bus network:** Ensure the 1.2 million bus kilometres saved from the first stage of Light Rail are immediately reinvested in the rest of the network.
- **Adequate planning and funding for mass and rapid transit system to all parts of Canberra:** next stage of light rail network to be built by 2030 or earlier, and bus transit lanes by 2019 in all locations which reduce bus delays without increasing delays for general traffic.
- **Support and facilitate expansion and extension of Canberra-Sydney bus service,** and of similar services to Melbourne and to other destinations.

Active transport for a healthy community and a healthy city

Walking: All people (almost) walk and all journeys have a component of walking

- **Identify and resource priority walking infrastructure, projects and policies.** Footpaths need to serve diverse community needs including people with disability as well as older people and parents who have children in prams.
- **Develop a Walking Plan by 30 June 2017 and adequately resource implementation.**

Cycling for commuting, recreation, sport and travel

- **Identify and resource priority cycling infrastructure, cost-effective projects and policies:** next generation trunk cycle ways having complete separation from vehicles and pedestrians in arterial road corridors with grade-separated crossings of high-speed arterials. Develop local routes for people to cycle to local schools, shops, services and friends

Cars creating less emissions and carrying more passengers per vehicle

- **Complete and release Low Emissions Vehicle Strategy.** Support transition of privately owned cars to 100% renewable energy by 2040.
- **Widespread use of transit lanes for cars carrying passengers** by providing travel time advantages to cars that carry passengers.
- **Provide drop-off areas** that make it easy to carry passengers close to their destinations

- **Review options to allow drivers to pick up and set down passengers at public transport stops.**

Support people to make the change

- **Identify and resource programs to support individual transport behaviour change:** Continue education programs for adults and school students in public and active transport, integrate parking policy with mode shift targets, and reduce public transport fare relativities.
- **Consult on ways to meet targets** to understand why people make their transport decisions and do not use 'behaviour change' approaches that are all stick and no carrot. Ask people what infrastructure changes would make them more likely to travel as car passengers (rather than as drivers), to walk, to cycle or to catch public transport.
- **Reduce speed limits:** especially in town centres but also in suburbs for safety and to encourage walkers and cyclists. Use fixed speed cameras in town centres for compliance. Reduce speed limit to 40 km/h along Northbourne Avenue in Civic and in residential streets.

Sustainable transport to reduce greenhouse emissions

- **Public transport powered by 100% renewable energy (bus and light rail) by 2040.**
- **Support innovation in renewable energy powered vehicle** access other than private ownership: car share programs, Uber, other disruptive technology and innovation.
- **Integrated transport plan to consider overall emissions** with planning process to undertake assessment of all emissions associated with transport.

Connecting Canberra to rest of the world

- **High Speed Rail:** Advocate for high-speed rail for Australian east coast with link to Canberra.
- **Reduce Freight:** Review incentives and disincentives to local production (e.g. tax differences between ACT and NSW) to encourage local production and reduce freight transport. Support and encourage rail freight as an alternative to road freight.
- **Support reduction in reliance on air travel:** Facilitate development of innovative connectivity, communications and transport approaches for modern business in Canberra.

Waste and resource management – being efficient through closed-looped material systems

Context

Wastes (resources with no further use) are an indicator of how we live within our environment. The amount of waste indicates how efficient we are in using resources. The type of waste shows what we value. The way we dispose of waste shows our concern for our environment.

The ACT is one of Australia's largest waste producers per capita. On Government figures, the ACT once had the best recycling performance in Australia. In 2005-06 it was 75%, however, the overall waste recovery rate reduced to 72.6% in 2014-15.⁶

Total waste to landfill continues to increase, as does our overall waste generation per person from 1.65 tonnes per person 2001-02, increasing to 2.06 tonnes 2007-08 then 2.64 tonnes 2010-11 and still 2.6 tonnes in 2013.⁷ Total waste to landfill 2014-15 was 243,793 tonnes.

The current end of the line for ACT waste is at Mugga Lane as landfill. Mugga Lane has finite capacity and will reach its limits within a few years. This waste is creating a hill out of a red gum yellow box grassy woodland valley. Old landfill cells 're-shaped' in 2014 to address landfill shortage created significant odour issues for surrounding suburbs. Two new landfill cells opened since provide expected capacity until 2018 at a cost of \$21 million in the ACT 2015–16 Budget.

The No Waste By 2010 Strategy adopted in 1996 was reported on in 2000 by ACT Commissioner for the Environment saying "to be successful, the strategy will require successive Ministers to ensure that it retains a high profile, both in the ACT Legislative Assembly and in the community. I believe the strategy cannot be successfully implemented without enormous combined support of Government and the businesses and residents of the ACT."⁸

Successive governments, however, did not fund actions set out to achieve no waste by 2010. The ACT Government should: return to a policy of no waste to landfill; prioritise waste minimisation and recycling as well as doing waste management, and; take an active role in determining the materials that enter the waste stream. All ACT waste should be managed and disposed in the ACT with only recovered resources leaving the ACT. Management of waste can generate social capital through development of local reuse, resource recovery and recycling services as demonstrated by recent establishment of the mattress recycling initiative.

Apply waste hierarchy

- **Embed hierarchy: Avoid, reduce, reuse, recycle, recover, treat, dispose** – in waste management policy, objectives, outcomes and contracts, and encourage and communicate to residents and business. Strengthen the waste hierarchy in education through the ACTSmart schools program. Disposal is a last resort not necessary with closed-looped systems.
- **Emphasise avoid including 'refuse' and 'reject':** ACT has reduced use of plastic bags and could restrict single use polystyrene products. ACT should work to manage use and reuse of products so if their only fate is landfill after a single use then we should not be using it.
- **ACT Government should be leader** working with other governments to develop national standards to support product stewardship and to restrict and ultimately phase out production of materials that cannot be reused or recycled.
- **ACT Government** should help develop markets for recycled products by preferential purchasing of recycled products where performance and price are comparable.

No Waste Policy

- **Zero Waste Objective:** return to target-based policy objective of no waste to landfill as ultimate aim after problematic wastes (asbestos, CCA treated timber etc.) are safely removed.

- **Establish statutory Waste Agency:** with authority and mandate to achieve waste targets
- **Publish accurate reporting:** Reinstate open and transparent public reporting as used to occur with all prepared reports made publicly available including on waste generation, recycling and best practice benchmarks. Waste streams data to be updated more quickly, more frequently and reported directly to community and Legislative Assembly.
- **Waste strategy:** require Waste Agency to develop and implement ACT Waste Strategy with key focus on short and long-term targets for waste reduction, resource recovery and diversion of waste from landfill. Waste Strategy to be revised and renewed at least every five years.
- **Stop the practice of cheap landfill** disposal by regulating disposal of waste that should instead be reused or recycled.

Reduce Waste Generation

- **Community Education:** Conduct program on waste avoidance and waste reduction including on difference between 'use by' and 'best before', and; an emphasis to reduce food waste given each household throws away about \$1000 food p.a. and food is about 40% of domestic waste
- **Change food labelling:** Work with national, NSW and regional local governments to change 'use by' labeling to 'best before' in all possible cases to reduce good food being thrown away.
- **Packaging Requirements:** Move to reduce the amount of unnecessary packaging through targeted education, regulation and contributing to national forums.
- **Develop options to ban sale of bottled water in ACT:** as for Bundanoon, San Francisco.
- **No non-recyclable products:** Restrict use or sale of products that cannot be recycled (e.g. cling wrap, polystyrene) or develop systems for recycling. Disallow packaging not be reused or recycled through ACT's waste system. Use of plastic should be reduced given environmental damage done by plastic litter and waste in waterways and eventually world's oceans.
- **Reduce Food Waste Program:** provide funding for delivery by community organisations.

Reuse and Recycling

- **Support growth and development of local reuse industry** Develop, implement strategy to support a robust local recycling industry to maximise local reprocessing and markets
- **Progress development of Hume Resource Recovery Estate** to assist local industry.

Reduce Waste to Landfill

- **Household Organic Waste:** Develop closed loop systems for garden and food waste to maximise nutrient retrieval and recycling. Divert all garden and food waste from landfill and use sustainably including as compost available to local producers at no or low cost.
- **Review past garden and food waste** systems to develop best model for ACT region. Establish composting system for domestic organic (putrescible) waste including some through existing treatment businesses and consider developing community and locality composting
- **Implement food waste charge on outlets.** Use revenue to support food recovery charities.
- **Commercial and industrial Waste:** Establish waste reduction system, perhaps similar to source-separated domestic recycling scheme, to apply to commercial and industrial sector.
- **Construction and Demolition Waste:** Establish systematic higher-end use value from demolition material including through allowing on-site sale of materials.
- **Provide incentives for construction companies** following proper procedures of sorting at source and delivery and also apply to other parts of commercial and Industrial waste stream.
- **Waste from Multi-Unit Dwellings:** Introduce recycling program focused on residents of multi-unit dwellings including changes to planning regulations to ensure that all new multi-unit developments have built-in exemplar recycling and waste management arrangements.
- **Waste in Public Places:** Introduce easy to use recycling bins alongside rubbish bins in all public places, including town centres and all sporting and cultural spaces
- **Legislate for extraction of resources:** Legislate that no material be accepted to landfill, or 'Energy from Waste Solutions', unless it is first processed to extract all resources possible.

Water conservation – smart use of a scarce resource

Context

Water is a fundamental environmental resource that shapes landscapes and nourishes flora and fauna. Water supply is critical for the human population, as well as the environment in which we live. Climate predictions have shown that we can expect more severe droughts, as well as greater floods, and both have major impacts on our environment and way of life.

In an urban society with steadily predicted population increase we need to be prepared for progressive water scarcity, and policies are needed to conserve and effectively use the water available. To maintain and enhance our living environment the conservation and re-use of stormwater and grey water become increasingly important.

The Murray-Darling Basin Plan ties Canberra to a fixed net volume for water supply, without any provision for increased volume related to population growth. The net volume is calculated by deducting the volume of treated wastewater discharged into the river from the amount of freshwater extracted, which cancels any gain from use of treated wastewater, dual flush toilets or domestic water recycling, since reduced discharge leads to reduced extraction.

Policy Measures

ACT Water Policy – reduce consumption, reuse and conserve

- **Think Water ACT Water:** Maintain ongoing support for an ACT water policy which encourages water re-use, minimises raw water consumption, conserves water from roofs and builds wetlands and stormwater ponds.

Water Infrastructure to improve water quality

- **Establish water quality improvement measures, in all new developments:** incorporating into suburb design wetlands, stormwater ponds and grassed swales to assist water quality improvement.
- **Retrofit existing major stormwater channels,** including Sullivan’s Creek, Jerrabomberra Creek, and Weston Creek with constructed wetlands and water retention ponds.

Water Sensitive Urban Design for a more liveable and sustainable city

- **Flexible planning for climate change:** Plan for potential variability in the climate in the future including long dry spells and flood events. The planning authority should assist in organising ways for the community to develop a water sensitive Canberra
- **Permeable root protection and water catchment for urban trees:** Our urban trees, especially in heavy traffic areas – foot, bicycle and even car – should have permeable hard stands shaped to collect water
- **Enhanced urban tree planting** to reduce heat loads and water run-off.

Stormwater Management to recognise value and improve quality

- **Provide urban community education campaign on stormwater,** emphasising the value of stormwater and need to maintain stormwater quality by reducing rubbish entering stormwater
- **Reduced runoff from new developments** 75% of total annual stormwater runoff to be retained within the community via harvesting, infiltration and aquifer recharge
- **Cleaner runoff:** Over 95% total annual stormwater runoff volume is filtered and treated before reaching stormwater system or receiving waters
- **Reduce number of stormwater ‘runoff days’** Reduce the number of days in which stormwater runs off the urban area, by a range of infiltration mechanisms.

- **Wetland and Stormwater Ponds:** Establish urban wetland and stormwater retention ponds to assist water quality improvement, wildlife habitat and residential amenity. In particular, there should be a focus on the water quality of Lake Burley Griffin and Lake Tuggeranong with ponds to reduce nutrient flows and faecal contamination from stormwater runoff from the urban areas
- **Building Site Management:** ensure the Environment Protection Agency has adequate resources to enforce erosion and sediment controls at building sites with a particular focus on new urban developments
- **Establish raingardens** (bioretention systems) in new and established developments, including residential streets, to mitigate the impacts of stormwater runoff. Enable community involvement in the maintenance of the raingardens.

Water Recycling – Greywater for reuse including for gardens

- **Assist use of Greywater:** Provide advice to residents on how to safely use greywater especially for gardens. The planning authority and other government agencies should be organisers and enablers of ways for the community to use greywater
- **Regulate greywater sensibly:** greywater should be regulated for appropriate safety levels using a risk management approach.

Water Efficiency – system changes supporting community responsibilities

In public housing and other rented properties

- **Retrofit all ACT Government owned public housing:** All ACT government public housing stock should be fitted with efficient fittings and appliances
- **Provide rebate to landlords** for fitting efficient fittings and appliances
- **Establish greywater systems in ACT Government owned public housing:** Greywater can be useful for gardens and green spaces and should be utilised for public amenity where appropriate. This is especially the case for community gardens associated to public housing
- **Support community involvement in moderating water use.**

General appliances

- **Restrict installation of wasteful auto-flushing toilets** – community education should occur ahead of water-wasting technologies
- **Provide more publicly accessible drinking water fountains** – in both private and public spaces and include provision for pets in appropriate locations.

Towards a smarter, sustainable Canberra – governance for sustainability

Context

Sustainability is about meeting the needs of the present without compromising the ability of future generations to meet their own needs.

Australia's cities and towns of the future must successfully integrate the needs of people, the built and natural environment. Environmentally sustainable development means we can enjoy a high quality of life while we retain and enhance our biodiversity, have a developed infrastructure that gives efficient and equitable access to services and utilities preserve the essentials of the 'Australian lifestyle' and contribute to the economic wealth of the nation.

The ACT Government has gone some way to improve the sustainability of its operations and decision-making. The ACT Government has developed some tools to facilitate this however more is needed.

Government policy should achieve sustainability

- **Sustainability Policy:** Overarching sustainability policy co-ordination to provide a strategic basis for agency action on sustainability with formal legal requirements for agency compliance and for Directors-General and CEOs to deliver sustainability outcomes
- **Sustainability (TBL) Assessment:** sustainability (TBL) assessment of major policy, legislation, programs and projects assessment at beginning of process of key decisions – note:
 - A proper sustainability assessment would include climate change analysis
 - Cabinet consideration of the sustainability impacts at decision point
 - Evaluation post-event to ensure they are delivering key outcomes.
- **Agency Sustainable Procurement:** mandatory requirement for agencies to prepare 'green' procurement plans including only procuring goods that can be recycled or reused
- **Sustainability Reporting:** a clear mandatory sustainability reporting framework that covers both Government progress and community progress on key strategic objectives – i.e. zero net emissions for the ACT as well sustainability reporting analysis of outcomes of major Government expenditure items as requested from time to time by the Legislative Assembly, the Public Accounts Committee or other Committees of the Assembly
- **Independent Sustainability Review:** Major review of Government's sustainability performance by the Commissioner for Sustainability and the Environment every four years with annual commentary in the Commissioner's Annual Report
- **Maintain independent role of Commissioner for Sustainability and the Environment:** The independence of the role is vital to ensure that Government actions do not adversely affect the environment.

Community consultation and engagement are key to positive outcomes

We support the aims identified by the ACT Government in ensuring greater openness in government and engagement and collaboration across sectors to maximise positive outcomes, and propose policies and initiatives under each aim:

- **'Citizen participation to improve the wellbeing of our community'**
 - Government and business engagement should ensure the community has a direct say in shaping future developments, especially for planning and development
 - That the government adheres to its *Guide to Community Engagement*⁹ which matches the type of engagement process (inform, consult, involve, collaborate) and associated maximum timeframes (6 weeks, 10, 16, 16 + weeks) with the complexity of the issue. The more participatory processes and the maximum timeframes and timeframes should be the default position, not the shortest – six weeks – as currently applied by ACT Government Directorates

- The Government should provide a response to the community on all community consultations, or should make the decision that was consulted, within the same timeframe offered to the community for consultation i.e. 8 weeks of consultation followed by Government action within a further 8 weeks
- Develop a 'one-stop shop' approach for citizens seeking to arrange public demonstrations on matter of public interest
- Utilise advisory groups to implement participatory processes (ref Guide to Community Engagement) through involvement and collaboration with the government for example a Public Transport Users Group.
- **'Transparency in process and access to information'**
 - Adopt a new Freedom of Information Act based on the default position that most Government information is public information and limit the type of information deemed not to be in the public interest to release
 - Provide genuine access through Freedom of Information by releasing legible, searchable documents in the same colours as the originals
 - Provide that all documents tabled in the Legislative Assembly are simultaneously published on the internet
 - Enable access to all Development Applications through an archive facility rather than removal from the ACTPLA website
 - Publish all Cabinet 'triple bottom line' assessments including environmental assessments for all major decisions and developments and for decisions that will have an impact on the environment.
- **'Community, business and government working together to deliver integrated responses that benefit all Canberrans'**
 - Apply the *Social Compact* in relations between all Directorates and community organisations¹⁰
 - Trial and implement 'deliberative democracy' approaches across a range of Government actions and decisions
 - Maintain and enhance the Environment Community Partnerships Program.

¹ ACT Government, Environment and Planning Directorate, [ACT Greenhouse Emissions](#), 2016

² United Nations Framework Convention on Climate Change, [Decisions adopted by the Conference of the Parties](#), FCCC/CP/2015/10/Add.1, January 2016

³ Unions ACT, [A comprehensive residential energy and water efficiency retrofit program for the ACT](#), 2016

⁴ Dominic Notter, Hans-Jörg Althaus, Reto Meyer, [The western lifestyle and its long way to sustainability](#), 2013

⁵ ACT Government, [Statement of Planning Intent](#), 2015, p6

⁶ ACT Government, Territory and Municipal Services, [Annual Report 2014–15: Volume 1](#), p21

⁷ Conservation Council ACT Region, [Submission – Draft Variation 305, Mugga Landfill Expansion – Stage 5 Draft Environmental Impact Statement](#), April 2013, page 1

⁸ ACT Commissioner for the Environment, [Progress towards No Waste by 2010](#), 2000

⁹ ACT Government, [Engaging Canberrans – A Guide to community engagement](#), 2011, p13

¹⁰ ACT Government, [Social Compact – a Relationship Framework between the ACT Government and Community Sector](#), 2012.