

A SUSTAINABLE TERRITORY

The ACT Government Sustainability Framework

The Government adopts a triple bottom line approach to sustainability, and recognises the interdependence of social, economic and environmental wellbeing. It also recognises the need for a long term perspective on sustainability and engaging the community in major government decision making.

As part of ongoing work the Government has released a range of policy documents supporting sustainability principles, including the:

- *ACT Planning Strategy – Planning for a sustainable city* (2012);
- *AP2: A New Climate Change Strategy and Action Plan for the ACT* (2012); and
- *Transport for Canberra – Transport for a Sustainable City 2012–2031* (2012).

How is the Government Supporting the Community to reduce the ACT's footprint?

Reducing greenhouse gas emissions

The ACT has the most ambitious greenhouse gas reduction targets of any jurisdiction in Australia, including a legislated emissions reduction target of 40 per cent below 1990 levels by 2020.

The ACT climate change strategy, AP2, establishes a clear strategy for the Territory to meet its 2020 emissions reduction targets and become a sustainable and carbon neutral community. In support of this goal, the ACT Government has also adopted a 90 per cent renewable energy target by 2020. The ACT is on track to meet these ambitious targets. Emissions fell by 8 per cent between 2011-12 and 2013-14. Emissions per person have also dropped dramatically, with emissions per person in Canberra now lower than they were in 1990.

In March 2015, the Office of the Commissioner for Sustainability and the Environment released an Implementation Status Report (ISR) on AP2. The report found that government policy, combined with greenhouse gas reduction targets, has positioned the ACT among the world's most progressive jurisdictions in terms of mitigating the impacts of climate change. The ISR provides a detailed assessment of ACT climate change policy and put forward a range of opportunities for the ACT Government to consider in the further development of its climate change actions.

The heavy lifting in emissions reduction is being achieved through innovative approaches to securing renewable energy. The ACT Large-scale Solar Auction process set a national benchmark for the efficient and cost-effective procurement of large-scale renewable energy facilities. The first auction delivered 40 Mega Watt (MW) of competitively priced solar energy generation in the ACT. The first 20MW solar facility has been operating since September 2014. A similar reverse auction process was applied to source 200MW of wind power, with the winning proposals announced in February 2015. When these projects are fully operating in 2017 the resulting wind power is expected to supply a third of Canberra's

electricity and, combined with solar, will provide approximately 45 per cent of the ACT's energy needs.

The renewable energy program along with a suite of other measures has the ACT well on track, to not only meet its nation leading greenhouse gas reduction targets of 40 per cent below 1990 emissions by 2020, but also to become a centre for clean energy knowledge and investment.

While AP2 is pursuing a major step-change in ACT emissions, it is also designed to achieve three additional outcomes:

- Ensuring a fair society in a low-carbon economy.
- Strengthening the ACT's capacity to adapt to a changing climate.
- Leading a more sustainable future.

The ACT Government has made significant progress on the implementation of AP2. Of the 18 actions contained in AP2, 13 actions have been completed with a further three actions complete but with ongoing implementation. Two of the remaining actions are under development and well progressed.

AP2 and its supporting legislation, the *Climate Change and Greenhouse Gas Reduction Act 2010*, are being reviewed in 2015-16 to refresh ACT climate change policy and incorporate the latest climate change science as well as changes to the national and international policy environment.

Adapting to a changing climate

Climate projections for our region indicate warmer and drier conditions with increased frequency of natural disasters, including drought and bushfire, and severity of extreme weather events such as wild storms, flash flooding and prolonged heatwaves. To enable us to adapt to a changing climate, and to change the way we do things to cope with a changing climate, the ACT Government is preparing an *ACT Climate Change Adaptation Strategy*. The strategy will help us identify our priorities for adaptation and coordinate our work so we are effective in building resilience. The Strategy will be released in 2016.

Improving Energy efficiency

The *Energy Efficiency (Cost of Living) Improvement Act 2012* (EEIS) commenced operation on 1 January 2013. The objectives of the Act are to:

- encourage the efficient use of energy;
- reduce greenhouse gas emissions associated with stationary energy use in the Territory;
- reduce household and business energy use and costs; and
- increase opportunities for priority households to reduce energy use and costs.

The scheme establishes energy savings targets and mandatory energy savings obligations for energy retailers. The scheme also provides targeted assistance to low income households.

Retailers report their energy sales and the activities undertaken to meet their associated Energy Savings Obligation.

The Scheme's initial three years is modelled to deliver around a 6.2 per cent reduction on emissions in 2015 and lifetime savings of 742,000 tonnes. During the first two compliance periods, approximately 550,000 energy saving items such as light globes, standby power controllers and door seals were installed in over 50,000 households, which includes over 14,000 priority households. Additionally, over 1500 refrigerators and freezers were decommissioned (including de-gassing) and destroyed.

An independent review of the EEIS was completed in September 2014, which concluded participating households will save about \$1,600 over the lifetime of activities they have implemented. There is high participant satisfaction and significant overall benefits to continuing the EEIS.

The third compliance period commenced on 1 January 2015 and the ACT Government is currently considering options for the continuation of the EEIS beyond the currently legislated end-date of 31 December 2015.

The Government's ActSmart range of programs has been supporting households and small businesses by providing education and expert energy efficiency advice.

The ActSmart sustainability hub was launched in February 2015, providing an online sustainability portal to engage the community on climate change matters and to provide integrated information, advice and support to Canberra and the region. The sustainability hub outlines detailed information on the action the Government is taking towards climate change, and provides self help tools and advice to the community, households, schools and businesses to assist them in becoming more sustainable and to reduce emissions. Included on the portal is the Carbon Challenge, a tool to assist all ACT residents become more sustainable in their daily lives through setting sustainability challenges and receiving advice and support on completing them to reduce living costs and emissions.

The Outreach program assists low income householders to improve energy efficiency in their homes and reduce energy bills by providing advice and energy efficient appliances and fittings. The program has assisted over 6,000 households with energy efficiency savings equivalent to over 2,150 tonnes carbon-dioxide annually.

Sustainability in the Built Environment

The *ACT Planning Strategy – Planning for a sustainable city*, released in July 2012, establishes how the Territory will develop to meet environmental, social and economic challenges.

Together with *Transport for Canberra*, the *ACT Planning Strategy* sets out a planning and transport framework to guide future growth of our city. These strategies prioritise development along the major transport corridors that connect the town centres and major group centres to achieve a more compact city form.

The approach being taken by the ACT Government to integrate land use and transport planning will contribute to the development of Canberra as a compact and efficient city. It will deliver on the Government's vision for a connected, liveable and prosperous city with strong communities and a growing economy.

The Government's focus on urban renewal and intensification around the city centre, major town and group centres and along transit corridors is an important step if we are to achieve our desire for a more compact and vibrant city.

Creating a more compact city, and encouraging active travel with more people walking, cycling and using public transport, will greatly reduce the demand for expensive roads and other urban infrastructure. This will also improve the health and wellbeing of our community, thereby reducing the demand for additional health infrastructure and services.

Planning has a defining role in helping to shape Canberra as a healthy, safe and connected city. Good urban planning can shape our neighbourhoods to create high quality public realm spaces and encourage active travel options of walking, cycling and public transport. This in turn has benefits for quality of life, including physical and mental health.

The ACT Government's master plan program responds to the Government's strategy to create a more compact, efficient city by focusing urban intensification in town centres, around group centres and along major public transport routes. This approach helps to balance where greenfield expansion occurs, again allowing consideration of the most cost effective solutions for building on our existing infrastructure.

The master plan program is a key initiative of the planning portfolio that supports genuine suburban renewal opportunities. The master plans are aimed at revitalising and attracting investment to these centres, which in turn will assist with economic growth and diversification.

Master plans have or are being prepared for all major centres in Canberra. *The City Plan* project will help deliver a more vibrant and sustainable city heart. Several projects are being developed as part of *the City Plan*, including City to the Lake, Capital Metro and planning for the Northbourne Avenue corridor, and Constitution Avenue.

The Government recognises the role of urban planning and ensures a sustainable future by incorporating innovative planning and design in developments, delivered through the Land Development Agency.

For over a decade, the ACT has led the way on disclosure requirements for building energy efficiency. The Territory has been recognised internationally in the development of these standards.

The ACT continues to lead in addressing sustainability issues with the early adoption of new building standards for energy efficiency, a well established energy rating scheme and the introduction of licensing for residential building energy efficiency assessors.

Sustainability in Transport

Integrated transport networks shape the way cities grow and prosper. The ACT Government is building an integrated transport network through delivering on key government priorities including *AP2, Transport for Canberra* and the *ACT Planning Strategy*. These policies encourage increases in the number of people using active travel and public transport and reductions in greenhouse gas emissions and traffic congestion.

The Government will spend \$23 million on projects related to active travel in 2015-16. This includes the following:

- \$0.2 million to design Stage 1 of the Molonglo Cycle Highway from the City to Acacia Inlet, off Lady Denman Drive;
- \$1.5 million for the final design and construction of new road crossings on Sullivans Creek cycle path; and
- \$0.050 million to work with the local arts community to design, produce and install creative bike racks.

The Government has allocated \$31.2 million over two years to undertake construction of the duplication of Gundaroo Drive between Gungahlin Drive and Mirrabai Drive and associated infrastructure to improve traffic flows in the Gungahlin area.

The Government will continue the duplication of Ashley Drive from Erindale Drive to Ellerston Avenue by committing over \$24.6 million over three years to address traffic congestion and commuter delays. The works will include a new pedestrian bridge, intersection signalisation and upgrades.

The Government is committed to progressing Capital Metro – Canberra’s light rail project. This initiative is an important part of the Government’s vision to deliver a truly sustainable and creative city. The Capital Metro project represents an important contribution to Canberra’s response to the environmental challenges of air quality, traffic volumes and congestion, ambient noise, greenhouse gas emissions and urban growth. It will contribute to the Government’s vision of high quality transport connections, more active lifestyles and a revitalised city centre.

The Capital Metro Agency has shortlisted two consortia for the project’s request for proposal procurement stage, with the selection of the successful bidder likely to be announced in early 2016. Capital Metro Agency is using the Infrastructure Sustainability Council of Australia (ISCA) framework to guide the project’s approach to sustainability matters. The Government is looking to set high standards for sustainability in design, construction and delivery with the Capital Metro project.

Sustainability in Waste Management

The Government released the *ACT Waste Management Strategy 2011-2025: Towards a Sustainable Canberra* in December 2011. The current waste strategy outlines a comprehensive framework to increase resource recovery to over 90 per cent by 2025.

The Government will continue to trial a bulky waste household collection service, which annually provides one free collection per dwelling to eligible concession card holders. The success of this program will be evaluated during 2015-16.

The *Actsmart Business and Office* waste management and recycling programs have resulted in waste diversion to landfill savings of over 1,000 tonnes CO₂-e annually. A total of 21,197m³ of waste was diverted from landfill by the 207 Actsmart Business accredited sites during 2013-14. This represents a reduction in emissions of 3,066 tonnes CO₂-e. This is equivalent to taking 807 cars off the road for one year.

The Government will continue to provide waste education to schools and the community and produce engaging promotional materials designed to encourage greater rates of recycling. The 20th anniversary of household recycling in the ACT in 2014-15 will provide a central theme for looking at where we have come from and envisioning where we aim to be in 2025.

The Government is committed to Improved Waste Recovery and has committed over \$2.8 million for a Feasibility Study to determine how the ACT can facilitate the delivery of expanded resource recovery services and the generation of electricity from waste, including any required investment in infrastructure.

The Government has allocated \$21 million on the expansion of the landfill cells at the Mugga Lane Resource Management Centre. These works will continue the provision of the ACT's landfill needs.

Sustainability in Water Management

The Government is committed to targets to reduce demand for potable drinking water and increase the use of cost effective fit-for-purpose non-potable water where effective.

The *ACT Water Strategy 2014–44: Striking the Balance* was released in August 2014 which will guide management of the Territory's water supply, management and catchment practices over the next 30 years.

The ACT Water Strategy will guide:

- improved integrated catchment management across the ACT and region;
- long term security of water supplies to meet the needs of a growing population and the environment;
- improved water conservation and water sensitive urban design to reduce per capita potable water use by 25 per cent (and by 40 per cent in new developments, extensions and refurbishments)
- strategic investment in catchment management and water security;
- integrated water cycle management in the planning and design of urban environments;
- provision of safe and clean water for the ACT; and
- strong community involvement in water resource management.

In February 2014 the ACT and Commonwealth Governments committed funding of up to \$93.5 million to address the issue of water quality in our lakes and waterway's under the Murray-Darling Basin Priority project. The project has a two staged approach to improve water quality by firstly investing in understanding the problem and then evaluating effective long-term solutions.

The first phase which began in February 2014 focuses on implementing a comprehensive ACT-wide water quality monitoring and investigation program. It consists of a number of components, including:

- an ACT-wide monitoring study which will focus on integrated catchment monitoring. The proposed integrated monitoring regime will enable the Government to track a range of water quality parameters through the ACT and surrounding catchments;
- Creation of a specific water quality monitoring framework, and enhanced water quality monitoring for six priority sub-catchments across the ACT and surrounding catchments;
- Identification and analysis of water quality treatment train options across six priority sub-catchments, including multi-criteria and cost-benefit analysis;
- a survey and analysis of social expectations of water use regarding ACT and region waterways, stormwater issues and factors affecting water quality – to inform an effective behaviour change campaign; and
- an audit of existing government-owned water quality infrastructure (e.g. gross pollutant traps, wetlands, water quality control ponds) to assess how well they function.

These investigations will form the basis for the Phase 2 Business Case for the Project, which will include a triple bottom-line (social, environmental and financial) and cost-benefit assessment, and is a requirement to secure Commonwealth approval and funding for Phase 2 activities.

Sustainability in Public Housing

All new public housing dwellings are built to the Gold level of the Liveable Housing Australia Design Standard. The dwellings are also constructed to achieve 6-star energy ratings under the Nationwide House Energy Rating Scheme (NatHERS). To achieve this rating, dwellings are appropriately oriented for solar gain and include wall and ceiling insulation, energy efficient glazing and shading and draught proofing to windows and doors. Energy efficient appliances such as high efficiency gas or electric boosted solar hot water systems are installed with the aim of reducing energy costs for public housing tenants.

The Government has provided \$30 million over ten years from 2007-08 to improve the energy efficiency of public housing, with approximately 7,500 dwellings (around 64 per cent of housing stock) already upgraded. Works undertaken include ceiling and wall insulation, draught sealing, pelmets and curtain rods, energy efficient hot water systems and heating appliances.

In new constructions and as part of major upgrades, water saving measures and sanitary fixtures are installed to reduce the consumption of potable water, and reduce the flow to the sewer and stormwater systems. This includes water tanks, grey water systems, dual flush cisterns, water efficient shower heads and flow regulators/aerators.

Government funding from 2005-06 to 2008-09 saw the installation of water efficient devices (shower heads, dual flush cisterns and flow regulators) to approximately 2,700 properties. Following on from this, Housing ACT (HACT) has continued to provide these water efficient devices on failure or when properties are upgraded.

From 2009-10 to 2013-14 water efficient devices were installed at over 6,700 properties. HACT has developed a further delivery of works program for 2015-16 to target high consumption stand alone properties which have not yet received any water efficient upgrades.

HACT also sponsors and provides funds to the Actsmart Outreach Energy and Water Efficiency Program which assists low income families in the ACT to improve the energy and water efficiency of their homes. Through education and tailored home assessments, households are able to reduce their energy and water consumption and therefore the impact of their energy and water bills.

How is the Government reducing its own footprint?

The 2012-13 Budget Papers announced a *Carbon Neutral Government Fund* (CNGF). The CNGF replaces and expands the *Resource Management Fund*. The CNGF has been supplemented through the redirection of funding previously used for Greenpower purchases into the CNGF to assist the Government in funding more projects.

Between July 2012 and June 2015, the CNGF has supported 18 projects with \$6.4 million provided.

Projects supported under the CNGF include upgrades to lighting technology and water heaters across various Government schools and other buildings, energy efficient heating at two hydrotherapy pools and the installation of a solar hot water system at Erindale College and Leisure Centre.

Sustainability in Health

The ACT Health *Sustainability Strategy 2010-2015* and the *ACT Health Resource Management Plan 2014-2016* provide a roadmap for a collaborative sustainable future and contain actions for seven focus areas – Models of Care, Buildings and Infrastructure, the Digital Health Environment, Transport, Regulatory Environment, Workforce, and Partnerships and External Service Delivery. ACT Health is currently renewing the Sustainability Strategy and Resource Management Plan.

One of the key elements of the strategy is the delivery of the *ACT Health Sustainability – Environmental Principles and Guidelines – Building and Infrastructure Projects (Ecological and Sustainable Development - ESD)*, which is developed to ensure that all capital projects

and major refurbishment works can incorporate design and functionality whilst aiming to reduce carbon emissions. This document is also currently being reviewed.

As one of the largest energy consumers in the Government, ACT Health is faced with the challenge of meeting the health needs of a growing population, an increasing elderly population and more prevalent chronic disease. This situation is being addressed by delivering more sustainable buildings via the Health Infrastructure Program.

ACT Health is diverse in its nature in that facilities are spread across the Territory and therefore requiring strategic thinking around transportation of patients and models of care.

ACT Health will install electric vehicle charge stations at 6 health sites across Canberra. These electric vehicle charge stations will allow for the expansion of ACT Health's electric vehicle fleet and greater flexibility with respect to electric vehicle charging facilities. ACT Health also continues to implement strategies in support of *Transport for Canberra – Transport for a Sustainable City 2012 – 2031*.

ESD initiatives incorporated into the ACT Health infrastructure builds, upgrades and improvements aimed at reducing carbon emissions and energy costs include:

- initiatives incorporated into the construction of Belconnen and Tuggeranong Community Health Centres such as:
 - re-use of Reverse Osmosis (RO) water from the renal process into use in the toilet facilities on both sites;
 - energy efficient lighting;
 - motion sensor tap ware;
 - motion sensor operation for lighting in office areas;
 - energy efficient window glazing including double glazing in some areas;
 - intelligent networked lighting controls;
 - use of paints, glues and sealants with low Volatile Organic Compounds (VOC); and
 - the replacement of the old boiler system for heating and old chiller units with high efficiency VRV units (at Tuggeranong only);
- refurbishment of an internal space in Building 1, Level 5 (Canberra Hospital) to create 60 beds for decanting. This upgrade was linked into existing infrastructure and low flow tap ware was used throughout Level 5;
- employment of ESD initiatives in the health centres of the Canberra Region Cancer Centre (CRCC);
- a range of Capital Upgrade Program (CUP) projects supporting sustainability including:

- smart metering to deliver improved data reporting performance; and
- electric vehicle charge points to accommodate additional electric vehicles.

ACT Health is currently making application to the CNGF to install photovoltaic (PV) Solar panels on the roof of the Southern Multi Storey Car Park (Canberra Hospital) and an LED replacement program for existing hospital infrastructure.

Sustainability in Schools

The Government is assisting schools to reduce water and energy consumption, waste going to landfill as well as supporting the sustainable management of school grounds through programs and best practice guides implemented through *Actsmart Schools*. All ACT schools are now registered with *Actsmart Schools*.

The Government will build on the continued success of this initiative in 2015-16 by:

- upgrading the *Actsmart Schools Energy Program* – conducting audits and providing advice where necessary, assisting schools to establish student energy teams and developing a student energy kit to encourage the whole school to adopt sustainable behaviours;
- providing assistance to schools to establish and maintain a waste and recycling system by offering support to staff and student teams and providing a range of resources such as an interactive waste display and a waste PowerPoint for the waste and recycling system to be explained to the whole school community;
- providing professional development for teachers in the areas of energy efficiency, waste management and sustainable management of schools grounds;
- monitoring water usage and providing advice and assistance to schools to reduce water consumption as part of the Education and Training Directorate's *Smart Meter Program*; and
- collecting accurate data for monitoring, reporting progress and the accreditation of schools.

The Carbon Neutral Schools – Stage 1 project continues in 2015-16. Works are planned at up to eight schools to improve the thermal performance of the building fabric which will include ceiling insulation, improved glazing and draft proofing. To complement these infrastructure changes the Education and Training Directorate will work with these schools to foster a sustainable school community.

As part of the Investing in Healthy Kids Canberra initiative, a minimum of two water refill stations have now been installed at all ACT public schools. This initiative is linked to the Government's Towards Zero Growth: Healthy Weight Action Plan which incorporated the removal of vending machines from ACT public schools. Each student was also provided a re-usable water bottle to encourage tap water as the drink of choice and reduce plastic waste.

Projects funded under the CNGF completed in 2014-15 include the installation of:

- LED lamps at 19 ACT public schools; and
- solar pool heating at Cranleigh and Black Mountain Schools.

Additional energy conservation measures for ACT public schools, will be investigated in 2015-16. The intention is to have energy efficient lighting installed in all ACT public schools by the end of 2016.

The implementation of environmental and sustainable design principles in landscape will continue to be expanded in 2015-16, focusing on outdoor learning areas. These design principles increase infiltration into subsoil, improve water quality as well as the microclimate and encourage the development of biodiversity.

ACT public schools will continue to re-invest their Feed-in-Tariff income in 2015-16 to support sustainability upgrades at their individual school sites, including energy and water conservation measures, recycling and waste diversion programs, landscaping and curriculum development. The ACT Government will expand the PV systems at five ACT public schools. The Coombs Primary School in the Molonglo Valley, which will open at the start of the 2016 school year, will have a 100kW PV system installed. This will be the largest solar panel system at any ACT schools site.

To support active transport to school, improvements will be made to cycle facilities at five ACT public schools. Improvements will also be made to at least one public school as part of the whole of government *Ride or Walk to School Active Streets* pilot project.

A building tuning trial program will be undertaken at two ACT public schools, with the aim of improving building heating ventilation and air-conditioning operating efficiency. Outcomes of the trial will also inform the new air-conditioning maintenance contract tender to be issued during 2015-16, in order to achieve ongoing energy improvements by the maintenance contractors.

Sustainability in Justice and Community Safety

The Justice and Community Safety (JACS) Directorate is committed to carbon neutrality and has already undertaken numerous measures to support ESD across its property portfolio. The Directorate's approach to increasing environmental resource efficiencies is contributing to a sustainable future for the ACT.

The JACS Directorate Resource Management Plan (RMP) outlines the Directorate's approach, commitment and objectives to increasing environmental resource efficiency.

Under the direction of RMP, energy audits have been conducted on a number of high use sites. The recommendations outlined in the audits have enabled the development of a program for the delivery of energy efficiency projects in JACS.

The Directorate has a program of works focused on implementing energy efficiency measures. Over the last four years, JACS has dedicated over \$0.2 million per year for energy

efficiency works from the CUP to implement ESD measures across the property portfolio of the Directorate. Between 2013-15, this initiative has provided:

- targeted energy audits and energy efficiency projects of high energy consumption properties, including the Alexander Maconochie Centre;
- upgrading of building management systems, and heating ventilation and air conditioning systems at high energy use sites;
- upgrading to energy efficient lighting and lighting systems across owned and leased sites, including the Alexander Maconochie Centre, and the ACT Emergency Service Agency (ESA) Headquarters;
- installation and expansion of solar panels and solar hot water systems at selected sites, including the Ainslie and Kambah Fire and Rescue Stations and the Forensic Medicine Centre; and
- implementation of a pilot project to achieve carbon neutrality at the Ainslie Fire and Rescue Station.

The JACS Sustainability Committee was established in 2011. The committee comprises representatives from each business unit and oversees the implementation and monitoring of initiatives targeted by the RMP to ensure efficient and effective outcomes.

The JACS Directorate has actively participated in the Actsmart program to reduce waste, water and energy consumption. JACS has committed to undergoing accreditation through the Actsmart Business Program across all business units to improve the current levels of recycling and to lower waste to landfill. In addition, training and information sessions are provided in sustainability leadership for JACS business unit executives and Sustainability Committee members. A staff sustainability survey has been conducted to identify behaviour change outcomes with delivered measures. A dedicated environment and heritage officer is attached to the Capital Works and Infrastructure Unit to coordinate the relevant training and the management of environmental and sustainability projects.

Sustainability – Community and Services

Within buildings occupied by Community Services Directorate (CSD), the Directorate is committed to sustainability improvements in line with the *Carbon Neutral Government Framework*.

In order to clearly identify potential areas for improvement, CSD have utilised the Actsmart Program to undertake site specific audits and provide reports. Energy audits have been completed on three buildings with the two largest office accommodations sites (Nature Conservation House and 11 Moore Street) scheduled to be completed within the next few months.

Where possible, CSD will implement the energy conservation measures identified within the reports, making use of the CNGF for key projects.

CSD is also committed to reducing the amount of waste generated within its buildings and has implemented the Actsmart Office Recycling Program in 80 per cent of its portfolio. CSD will continue rolling out the program and work towards Actsmart accreditation at all sites.

A Sustainability Showcase was incorporated into the construction of the West Belconnen Child and Family Centre, including solar panels and a wind turbine. To date this has resulted in the generation of over 50,000kWh of electricity.

Sustainability – Capital Upgrades in 2015-16

The 2015-16 Budget Capital Upgrades Program includes a number of activities aimed at reducing the Government's footprint and improving environmental outcomes. These include:

- installation of energy efficient lights at Canberra Institute of Technology campuses;
- energy efficiency upgrades in Youth and Community Facilities and Government buildings;
- expansion of solar panels in schools;
- installation of smart meters to school irrigation systems;
- installation of energy efficient street and traffic lights;
- improving pollution control measures at gross pollutant traps, to improve water quality; and
- recycling drop off centre upgrades for Tuggeranong, Belconnen Town Centre, Mugga Lane Resource Management Centre and West Belconnen.

Protecting the Environment

Environmental protection will continue to be a high priority for the Government during 2015-16. Conserving the Territory's environment for future generations entails balancing development needs with the responsible and efficient use of available resources.

The Government will reduce the ACT's vulnerability to bushfire through implementation of Version 3 of the Strategic Bushfire Management Plan. The 2015-16 Budget provides funding for fire management activities, including for fuel hazard reduction works in the Lower Cotter Catchment to assist in the protection of the Cotter Dam water supply from the adverse effects of unplanned fire.

An integrated catchment management program for the Lower Cotter catchment is being funded through the 2015-16 Budget. This will improve the management of threatening elements such as environmental weed invasion, erosion and sedimentation, vertebrate pests and inappropriate visitor interaction including anti-social behaviour and vandalism.

The Government will continue to provide on-ground support to volunteer groups in the ACT's parks and reserves. Ongoing funding has been allocated in the 2015-16 Budget to maintain stronger relationships with the community and encourage the formation of new Parkcare groups.

Agreed recommendations detailed in the Commissioner for Sustainability and the Environment's various inquiries will be implemented as funding allows. Work has progressed on implementing these recommendations and the development and review of Plans of Management associated with nature reserves is on-going.

The 2015-16 Budget also provides for further activities under the ACT Government's environmental offsets program including works to improve the infrastructure and ecological condition of:

- 234 hectares of Golden Sun Moth habitat within Kinlyside Nature Reserve;
- Mulligans Flat and Gorooyaroo Nature reserves; and
- 549 hectares of Box Gum Woodland across six sites including Kinlyside, Mulligans Flat, Gorooyaroo, Justice Robert Hope Park and Isaacs and Pinnacle Nature Reserves.

The Government will develop a strategic and operational plan to guide the long term management of Canberra's urban forest including the strategic removal and replacement of ageing trees, planting of new trees and infill replanting.

Community Engagement

The Government has been involving the community in all aspects of climate change and environment policies. The Government is committed to supporting the community in undertaking activities that complement the delivery of environmental priorities. In 2015-16, the Government will continue to provide support to community partners including the Canberra and South East Region Environment Centre, the Conservation Council and SEE-Change ACT.

ACT environment grants will continue to support worthwhile community projects addressing native habitat rehabilitation and control of weeds and pest animals.

In 2014 the Climate Change Community Engagement Strategy was released. As one of the actions stemming from AP2, the Strategy reaffirms the Government's commitment to effective engagement with the community and outlines key areas of work including the development of a sustainability portal under the Actsmart banner, extension of engagement partnerships with key community representative organisations including the ACT's Climate Change Council and the preparation of a media campaign.

The ACT Climate Change Council advises the Minister for the Environment and the Government on reducing greenhouse gas emissions and adapting to future climate change. Comprised of experts and leading practitioners in the fields of science, social work, business and planning, in this role it will continue to be a key point of contact for community engagement activities for the Government.

In 2015 the Government released a sustainability web hub for accessing information on a range of sustainability issues, including climate change. actsmart.act.gov.au is the first point for members of the community to go when looking for rebates and assistance to save energy and water, reduce waste and cut greenhouse gas emissions.