

# ADAPTING TO CLIMATE CHANGE

## KEEPING OUR CITY COOL AND OUR COMMUNITY SAFE AS THE CLIMATE CHANGES

We want Canberra to remain a beautiful, safe and liveable city as our climate changes. We want our community to be well prepared for the unavoidable impacts of climate change, with support available for those who need it.

Our climate is changing, and we need to adapt. We are already experiencing the impacts of climate change including more frequent heat waves, more intense bush fires, more severe droughts and increased intensity of rainfall and storm events. Even with our ongoing work to reduce emissions as quickly as possible, these impacts will worsen.

The negative impacts of these events can be reduced if we are prepared, if we implement city cooling measures, and if we work to protect those who are most vulnerable in our community. We will be proactive in preparing for impacts, building resilience and targeting key groups for assistance in preparing for and responding to events.

### THE ACT GREENS WILL:

- ▲ Plant at least 20,000 street trees each year.
- ▲ Strengthen protections for street trees.
- ▲ Bring back the bunkers – build shaded and weather resistant bus shelters across Canberra.
- ▲ Require green space and city cooling in new developments.
- ▲ Trial city cooling measures like misting, green facades and water features.
- ▲ Establish a Chief Heat Officer to oversee the implementation of heat wave related preparedness, response and recovery efforts.
- ▲ Develop a Climate and Health Strategy.
- ▲ Increase funding for the bushfire preparedness and response.
- ▲ Introduce climate-proofing requirements for new houses to ensure they can maintain clean indoor air quality and have insulated slabs, double glazing and light-coloured roofs.
- ▲ Require new suburbs to maximise solar orientation of blocks.

## A COOL, GREEN CITY

### **PLANT AT LEAST 20,000 STREET TREES EACH YEAR**

The ACT Urban Forest Strategy identified in 2021 that an additional 450,000 trees needed to be planted on public land by 2045 to achieve the 30% canopy cover target. Since that time around 50,000 trees have been planted leaving around 400,000 more trees to plant. This means we need to plant at least 20,000 trees each year from 2025 to 2045. This is higher than the annual plantings that ACT Government has been able to achieve to date.

We will plant at least 20,000 street trees each year so that we can meet, and ideally exceed, our canopy cover target sooner than 2045, and we will ensure City Services have the capacity to water and maintain them. As the climate warms it will be increasingly important to have established street trees in our neighbourhoods, so the sooner we can get them in the ground, the better off we will be. The ACT Government has not updated its species list for street tree plantings to consider future climate warming. We will prioritise tree species that are most suited to the projected future climate and align species with other urban habitat and biodiversity goals where feasible.

### **PLANT SHADE TREES ALONG WALKING AND CYCLING ROUTES**

We want more people to choose to ride and walk for their journey, whether around their neighbourhood or across the city. In a hotter climate it will be increasingly important that walking and cycling paths are shaded, making them safer and more enjoyable to travel along in hot weather. We will evaluate shade cover along major walking and cycling routes and prioritise tree plantings along routes where shade cover is lacking. We will choose species to border active travel routes that maximise shading and minimise the likelihood of infrastructure damage and disturbance.

### **STRENGTHEN PROTECTIONS FOR STREET TREES**

Street trees are an important part of keeping our city cool, providing habitat for native species and adding beauty to the urban landscape. The city cooling value of trees will be increasingly important as the climate warms, both for the city as a whole and for surrounding houses that they shade and is important for achieving the ACT Government's target of 30% canopy cover in urban areas by 2045.

Street trees can be removed, with ACT Government permission, to make way for developments or where they are interfering with electricity infrastructure. We will strengthen protections for street trees by requiring the environmental and social value of trees, and their contribution to urban cooling and canopy cover targets, to be considered in all decisions on tree removals. The use of environmental accounting will enable the

social and environmental values to be quantified and considered alongside other factors. For example, factoring in the environmental and social values of a tree may lead to alternative solutions to tree removal, such as modifying a development or putting powerlines underground, being identified as the preferred option.

### **INCREASE GREEN SPACE AND URBAN COOLING IN NEW APARTMENT AND MIXED-USE BUILDINGS**

The way new developments are built shapes our city and influences the surrounding environment for decades to come. Developments that incorporate green space, planted courtyards, green walls or rooftop gardens can help to counter the urban heat effect as the plants cool the local area.

We will require new developments to incorporate green space and other urban cooling features such as green walls, rooftop gardens, or green courtyards where appropriate.

### **ENSURE THERE IS SPACE FOR TREES IN NEW SUBURBS**

New suburbs need to be designed with room for large street trees, and with enough space around houses for gardens and trees. The design of the suburb determines the extent to which the suburb experiences urban heating and will influence the liveability of the homes in that suburb for decades to come. There are planting area requirements in the Territory Plan that

are checked during the approvals phase, however there is little checking of what is actually built. We will enforce the requirement for new suburbs to have sufficient space for large street trees and individual blocks to have space for planted area and trees.

### **INCREASE ACCESS TO PARKS AND GREEN SPACE FOR CITY COOLING**

Urban parks and green spaces help to cool the city and offer places of refuge for people and wildlife during heat waves. Wetlands, ponds and lakes also play an important role in cooling the surrounding area, supporting plants and animals, and offering places for recreation and refuge in hot weather.

We will ensure there is a network of well-managed parks and waterbodies to cool the city, prioritising areas that currently have the lowest access to green space or are most affected by urban heat effects.

### **TRIAL CITY COOLING MEASURES SUCH AS MISTING, WATER FEATURES AND GREEN FACADES**

Localised urban cooling interventions, like misting systems, water features shade structures and planted facades, can transform areas of high urban heat into vibrant and attractive urban spaces that are pleasant even in hot weather and keep people healthy and safe during heat waves. We will work with the community to trial and implement city cooling interventions, including active measures such as misting systems and awnings,

or passive measures such as water features, street plantings, green roofs and facades.

### **BRING BACK THE BUNKERS - BUILD SHADED AND WEATHER RESISTANT BUS SHELTERS ACROSS CANBERRA**

Waiting for the bus in the hot sun or in the rain can be unpleasant. We want catching the bus to be easy and convenient, and that starts with having protection from the weather while you wait. Canberra's classic concrete bus shelters offer good protection from the weather, but the same can't be said for all bus shelters, some of which do little to protect people from the sun or rain instead focusing on offering surfaces for advertising. We will build shaded and weather resistant bus shelters across Canberra with a focus on areas where they are lacking. Rather than featuring ads, the new bus shelters will be great canvases for community art projects and could include green walls or other plantings.

### **WHAT'S THE INVESTMENT?**

- \$10 million over four years to fund an additional 5000 street tree plantings per year (the gap from average BAU planting).
- \$1 million for city cooling trials with additional funding to be sought from external partners.

- \$5 million to install around 200 bus shelters across Canberra.

## **HEALTHY AND PREPARED COMMUNITIES**

### **ESTABLISH A CHIEF HEAT OFFICER**

Cities around the world, including Melbourne, Miami, Athens and Dhaka, have appointed Chief Heat Officers in recent years in recognition of the risk that extreme heat poses for cities. Extreme heat in urban areas poses higher risk for particular community members such as outdoor workers, renters in energy inefficient housing, and people on a low income who may be unable to cool their home.

As we experience more severe heatwaves of longer duration, we will need to be prepared and be ready to support the community. We will establish a Chief Heat Officer to oversee heat wave related preparedness, response and recovery efforts and to coordinate across government, the community and the private sector. Heat wave response and preparedness will focus on the most vulnerable in the community including the elderly, those with a disability or chronic health condition.

We will establish a Chief Heat Officer to oversee the implementation of heat wave related preparedness, response and recovery efforts and to coordinate across governments, the community and the private sector.

## **DEVELOP A CLIMATE AND HEALTH STRATEGY**

Climate change poses major health and wellbeing risks including extreme heat, storm events and bushfire smoke. Climate impacts, and the longer-term threat of climate change, can also contribute to anxiety and depression, with negative effects on mental health and wellbeing.

Working closely with the health sector, we will develop a Climate and Health Strategy to set out measures to protect our community and manage the health impacts of climate change, including mental health. The Strategy will be designed to protect the health and wellbeing of community members including through preparedness for extreme heat, mitigating the health impacts of bushfire smoke, and preparedness for climate related events such as thunderstorm asthma. The strategy will identify measures to protect the most vulnerable cohorts in our community including people with a disability and people with chronic health conditions.

## **DEVELOP A CLIMATE ADAPTATION AND RESILIENCE PLAN**

The changing climate is predicted to affect our community in various ways, including experiencing more days over 35 degrees, reduced reliability of rainfall, increased bushfire season and increased intensity of storm events. These impacts will affect ACT Government operations and it is important that we plan for these

changes and do what we can to minimise negative impacts.

We will develop a Climate Adaptation and Resilience Plan that will embed climate change adaptation planning and considerations into ACT Government operations. This is important for ensuring we are prepared for events and can design services and programs that are fit for purpose in a changing climate.

## **PUT THE NEEDS AND ASPIRATIONS OF FIRST NATIONS PEOPLE AT THE HEART OF CLIMATE ADAPTATION**

As the longest continuing culture in the world, there is a lot we can learn from working with First Nations people. First Nations people have lived in Australia for more than 60,000 years and throughout this time experienced major climatic changes. There is much to learn from First Nations knowledge of, and connection to, lands and waters and their generational knowledge of land and sea management in a changing climate.

We will work closely with local traditional custodians to understand perspectives on adapting to climate change and to put the needs and aspirations of First Nations people at the heart of our climate adaptation responses.

## **INCREASE FUNDING FOR BUSHFIRE PREPAREDNESS AND RESPONSE**

With climate change projected to increase the occurrence and severity of bushfires and storms in the ACT, we need to ensure our agencies are

equipped to respond. The longer bushfire season will increase the workload for professional and volunteer firefighters. We will increase funding for the Emergency Services Agency and ACT Parks and Conservation Service to reflect the increased bushfire risk, longer bushfire season and increased likelihood of severe weather events due to climate change.

### WHAT'S THE INVESTMENT?

- An additional \$10 million over four years for bushfire preparedness and response.

## CLIMATE-PROOFING OUR BUILDINGS

### SMART, CLIMATE-RESILIENT HOMES

As the world heats up and experiences more extreme weather, it is more important than ever that our homes are built to provide us with protection and comfort, and are affordable to run.

We will introduce climate-proofing requirements for new houses to ensure they can maintain clean indoor air quality and have insulated slabs, double glazing and light-coloured roofs.

Insulating building slabs, introducing double glazing for windows and switching to light-coloured roofs are simple changes that will boost home energy efficiency, which reduces electricity bills, and increases home comfort in winter and summer. Ensuring

that our homes seal properly, rather than leaking air in and out means we can protect indoor air quality from impacts like bushfire smoke, as well as spend less money on heating and cooling. The Greens will introduce these sensible measures to the ACT National Construction Code Appendix to ensure we keep moving towards world's best practice building quality to help us adapt to climate change impacts.

### BUILDING SOLAR SUBURBS

Passive solar design is where a house is designed in a way to maximise winter sun, summer shading and natural ventilation to avoid or minimise the need for heating and cooling. A well-designed passive solar home is highly energy efficient, affordable to live in and provides comfortable temperatures all year round. Passive solar design requires having the right orientation for the home, with north facing windows. The design of new suburbs and the orientation of blocks dictates whether passive solar design will be possible or not for each block. Currently there is no requirement for a development to maximise solar orientation in suburb design, and orientation of blocks is dictated by a range of factors including the position of roads and maximising land sales.

We will require new suburbs to maximise solar orientation of blocks. By changing the way new suburbs are designed and re-thinking the placement of roads, we can maximise the number of blocks with orientation that enables passive solar design.

## WHAT COMES NEXT

Our proactive, science-based approach will mean we can build a smart, climate-resilient city that remains cool and liveable as the climate changes.