

Future Challenges and Opportunities for Climate Change in the ACT.

Purpose:

This presentation highlights the climate challenges the ACT is projected to face in the future. In highlighting these challenges, the Council notes the need for stronger action to limit the effects of climate change in the ACT. The Council provides a list of potential opportunities that will assist the Territory in diminishing the risks associated with future climate challenges.

Key Issue:

The effects of increasing global temperatures, other climate changes and sea-level rise are already being experienced globally. The intensity of these effects is predicted to increase in the future.

The ACT and surrounding regions are projected to experience longer, hotter summers and increased frequency and severity of storm events. This increases the level of threat from a varying climate, bushfires, heatwaves, water shortages and violent storms on lives, property, economic activities and the natural environment.

To avert the worst impacts of climate change, jurisdictions globally will need to develop and commit to stronger climate action. Importantly, this involves reducing greenhouse gas (GHG) emissions substantially in a short period of time.

The Council's presentation provides a list of opportunities to assist the ACT in reducing its GHG emissions and meeting its net zero target by 2045 as well as in adapting to accelerating climate change.

In preparing this presentation, the Council have considered a range of adaptation and emission-reduction options but note that many more have been compiled and assessed in documents such as the IPCC Working Group II Assessment Report. It is intended that these options will complement existing ACT Government strategies such as the Integrated Energy Plan, Living Infrastructure Plan and Zero Emissions Vehicle Strategy and Circular Economy Strategy and assist the Territory in combatting climate change.

Discussion points:

Climate Change presents a fundamental threat to both natural and human systems where there are impacts on social as well as economic conditions. To combat climate change, the ACT government has committed to reducing its GHG footprint and achieving net zero GHG emissions by 2045: a progressive stance globally. To meet its objective the government has put in place policy interventions that address emissions related but not limited to energy, transport, waste, agriculture and infrastructure. The Council has previously provided advice on the suitability of the net-zero by 2045 target given the evolving conditions.

The government's Climate Change Strategy 2019-25 provides a list of strategies and actions to assist the government in meeting its emissions reduction target. In their presentation, the Council reflected on the need for stronger measures for climate action. The Council stresses the need for a post-2025 Climate Change Strategy that comprehensively considers both adaptation and emission-reduction strategies in the development of government policies and programs. Emission-reduction and adaptation opportunities as outlined by the Council include:

- i. **Stronger focus on climate adaptation:** emphasis should be placed on adapting the ACT to the accelerating impacts of climate change.
Options include:
 - Design and build housing stock and a built environment suited to the climate of the future. Consider passive-house designs that improve liveability, address climate risks and reduce energy consumption. We know how to build this way but the building industry is not geared up for this change.
 - Improve disaster preparedness taking into account the increasing likelihood of complex risk events, including planning, strategies, early warning systems and associated action plans, and raising community awareness and capacity. Include domesticated animals in these approaches.
 - Improve fire and biodiversity management to address climate risks in reserves and national parks.
 - Set out a pathway to minimise the impacts of a growing population on the Territory's emissions and

climate.

- ii. **Health and wellbeing:** There is increasing evidence of pervasive physical and mental health issues from unmanaged climate impacts. It is critical that the government focus on health adaptation in relation to combatting climate change.
- Options include:**
- Assess, analyse, and consider workforce needs across different climate settings. This includes providing appropriate ventilation and insulation at work sites and developing action plans in case of problematic events.
 - Develop early warning systems with weather-related guidelines and forecast systems for employers, employees, health professionals and the general public to refer to and follow. These should address policing and related responses to upswings in some crimes including domestic violence that can be linked to climate events.
 - Adopt a co-benefits approach that integrates health and wellbeing metrics in the design, monitoring and evaluation of workplace and other policies and programs.
 - Modify sport facilities and other suitable infrastructure to be health havens (or refugia) during extreme weather events.
 - Improve climate-related performance of existing public infrastructure, especially schools.
 - Prepare climate-related
- iii. **Behavioural change:** Behavioural interventions can be considered against three levels of analysis. These include:
- a. Downstream interventions: Encourage citizens to take direct action where they can. Note, these interventions also focus on building public support.
 - b. Midstream interventions: Create an enabling environment;
 - c. Upstream interventions: Align business, markets, and institutions through net zero goals.
- iv. **Electrification, transport and built environment:** The natural gas, transport and building sectors are major contributors of emissions within the ACT. Additional intervention is required to reduce emissions from these sectors.
- Options include:**
- Assist renters in making their rental properties more energy efficient.
 - Build net zero emissions suburbs through best practice suburban planning including equitable green space allocations.
 - Continue the portfolio of policy instruments to encourage low-emissions households
 - Assess the viability for degasification in city hubs, offices and large buildings and include electrification/de-gasification into the building code including preparation for potentially volatile exit from gas as a major energy source.
 - Make active travel more viable and continue to support and incentivize electrification of both public and private vehicles.
 - Consider scope 3 emissions in the next ACT Strategy and where possible shift towards sustainable options along the supply chain.
- v. **EV ready buildings and fire safety:** adopt an EV-ready strategy to assist with the transition towards zero emissions vehicles.
- Options:**
- Continue to administer EV-ready building grants including funding for feasibility studies around the installation of EV-ready infrastructure in at least two buildings.
 - Consider establishing battery testing centres for both small batteries and larger car batteries to enhance safety and efficiency.
 - Adopt the Australian Building Codes Board's (ABCB) recommendations for EV charging.
- vi. **Business and investment opportunities:** The inclusion of both adaptation and emission-reduction efforts is expected to create clean, green, high-paying jobs and business opportunities. These jobs and

opportunities will complement the ACT governments work in developing a circular economy and catalyse discussion about opportunities such as becoming a globally-renowned green arts capital.

Options include:

- Support new and emerging businesses that focus on sustainability and especially energy-efficiency. Businesses to consider include lithium battery recycling and testing, solar panel recycling and testing, waste recycling, green building products and the integration of renewable energy into a wide range of systems.
- Support high quality carbon sequestration systems.

Overall, the Council notes that climate change amplifies inequality. While providing opportunities across different areas, the Council notes it is critical that the government consider vulnerable people and communities and overall equity when developing climate-related strategies.

Conclusion:

The paper has been prepared independently by the Council. The Council provides a brief synopsis of a number of options that could assist the ACT in combatting climate change and meeting its net zero by 2045 target. It is available for further consultation on these and other options.