ACT Government

# INTEGRATED ENERGY PLAN

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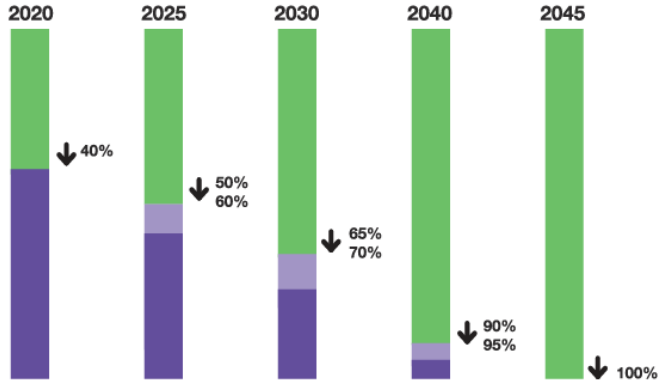
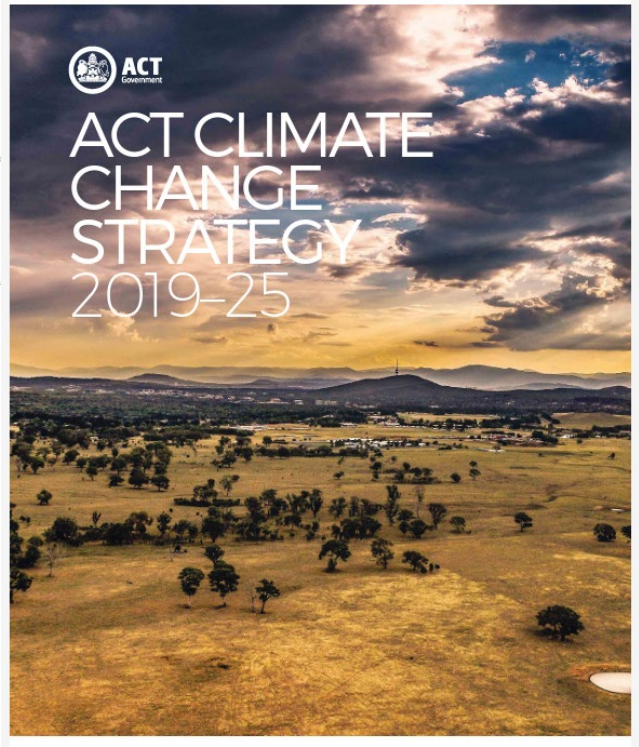
# Net Zero in the ACT

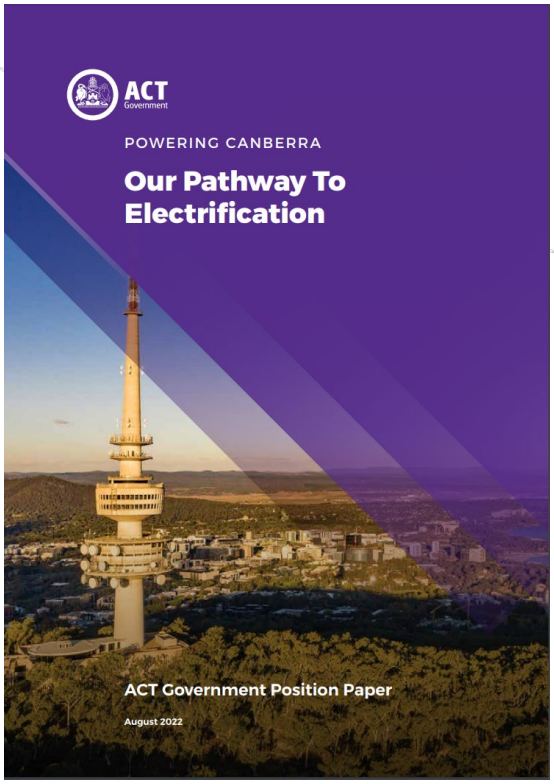
The ACT is committed to net zero emissions by 2045.

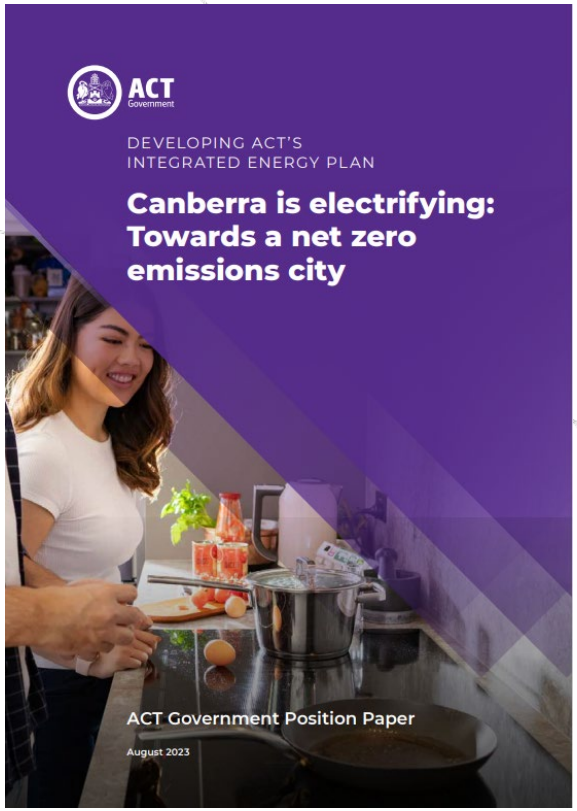
*ACT's emissions targets from 2020 to 2045.*



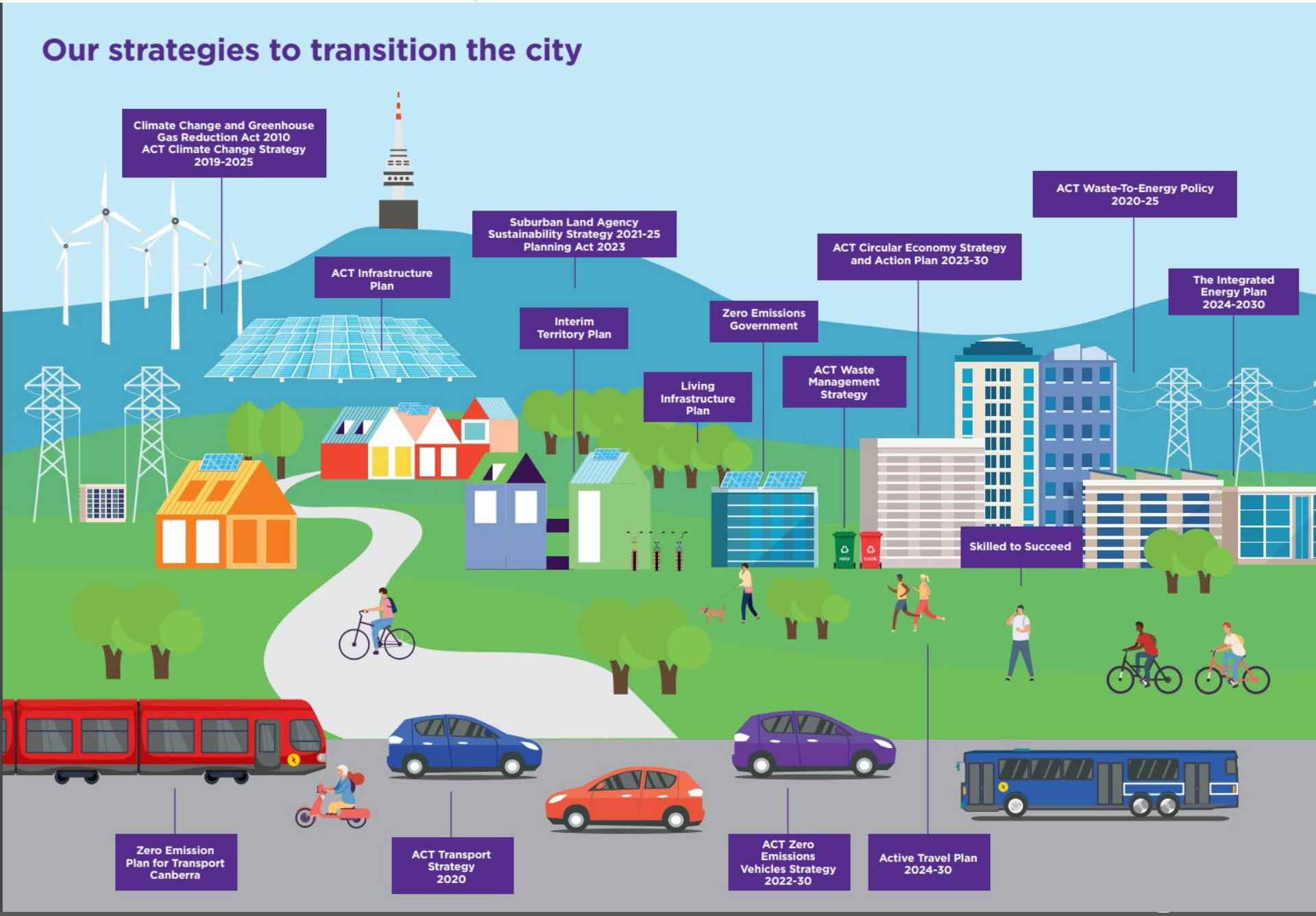
# Developing the Integrated Energy Plan





https://www.climatechoices.act.gov.au/__data/assets/pdf_file/0006/2509458/integrated-energy-plan-2024-2030.pdf




https://www.climatechoices.act.gov.au/__data/assets/pdf_file/0006/2509458/integrated-energy-plan-2024-2030.pdf

# Principles for the transition

# Navigating the transition

Households

Priority households

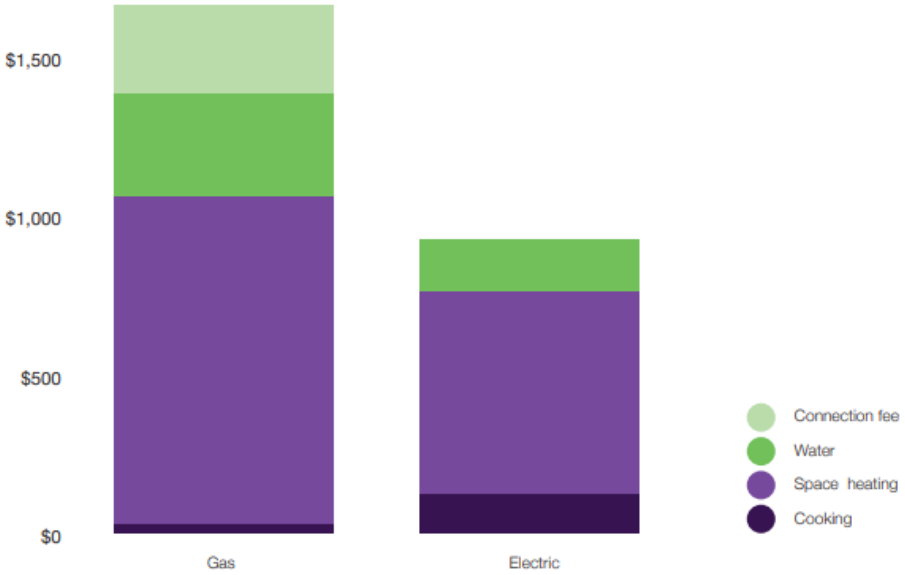
Complex buildings

Business & industry

Transport

# Households

| Challenges | Next steps | Outcomes for 2030 |
|---|---|---|
| **Households**<br>The energy transition requires full electrification of households including installing electric cooktops, hot water, heat pumps and space heating. | > Provide a one-stop-shop for households to help consumers who are able to improve energy efficiency and electrify, to do so.<br>> Explore potential regulatory interventions to support electrification.<br>> Undertake a review of the EEIS to inform its long-term direction. | More all-electric energy efficient homes, powered by 100% renewable electricity, that have reduced energy demand, are comfortable in all seasons as our climate changes and are saving on energy bills. |




*Source: Figure 3. Breakdown of annual energy cost by appliance (gas vs. electric) p17 of Energy equity in electrifying ACT households, Common Capital*

## Existing programs and support:

**Sustainable Household Scheme** – zero-interest loans for energy efficient upgrades

**In-home energy assessments** – for renters and homeowners to get free tailored advice from an expert energy assessor

**Online tools** – free tools to create a plan and make informed decisions to electrify e.g. Make Your Next Choice Electric

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# Priority households

## Existing actions for priority households

- ✓ A minimum energy efficiency standard for ceiling insulation for rental properties implemented from 1 April 2023.
- ✓ $35.2 million of ACT Government and Australian Government funds made available to upgrade community and public housing to meet the ACT's minimum energy efficiency standard for ceiling insulation and complete electrification upgrades.
- ✓ $2.13 million in rebates provided to date for electric appliances, insulation and solar PV for concession card holders as part of the Home Energy Support Program.
- ✓ Free advice made available for renters to make their home more energy efficient and save money on their energy bills.
- ✓ Eligible customers are supported through a concession or rebate on their electricity bill.
- ✓ The Energy Efficiency Improvement Scheme delivers help to priority households, with a target of 40% of the scheme's energy savings to be delivered to those in need.

| Challenges | Next steps | Outcomes for 2030 |
|---|---|---|
| **Priority households** Some members of our community will need more support than others to electrify their home. | > Electrify all feasible public and community housing by 2030.<br>> Provide $5.2 million for a pilot to cover the upfront costs of electrification for private households that most need support. | Those who need the most help to transition are benefitting from all-electric energy efficient homes, powered by 100% renewable electricity, that are more comfortable in our changing climate. |

# Complex Buildings

- 40,000 households living in townhouses and apartments in the ACT.
- Many have gas connections, and could face complex transitions to 100% electric systems and appliances. Cooking, space heating, and hot water appliances will need electrification, including communal systems.
- Barriers include: upfront costs, requirements to augment electrical and physical infrastructure, split incentive issues, timing, social and administrative challenges.

**Existing actions to help transition complex buildings**

✓ $3.6 million of ACT Government and Australian Government funding for residential apartments to install solar PV.

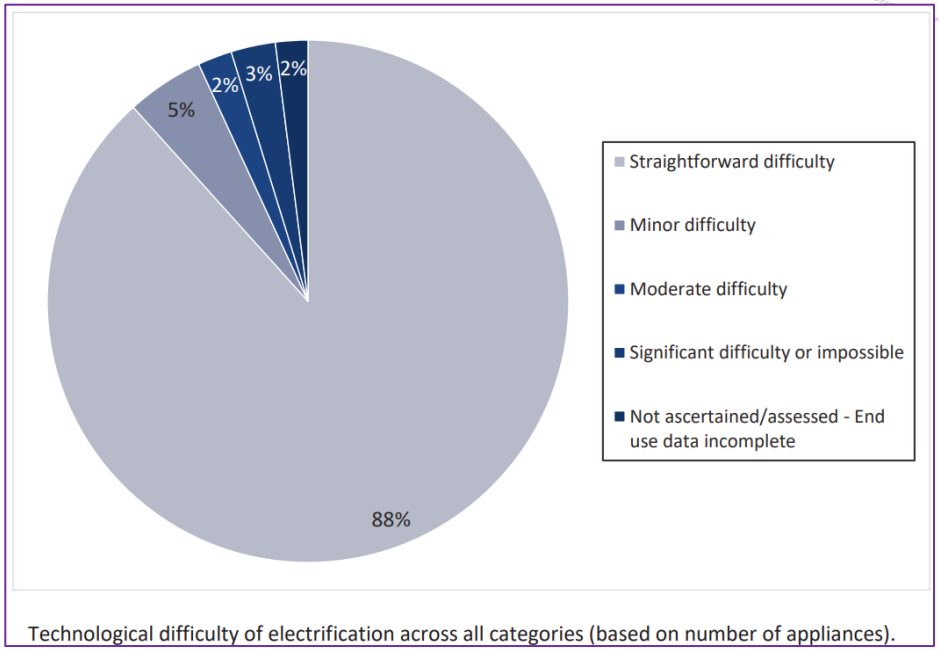
✓ Support for residential apartments to undertake EV ready feasibility studies and upgrade building infrastructure to allow for future EV charger installation.

Images: examples of large complex buildings which will need to find and retrofit electric alternatives for existing gas uses such as domestic hot water.

| Challenges | Next steps | Outcomes for 2030 |
|---|---|---|
| Many multi-use buildings face unique technical, engineering, regulatory and financial barriers to electrification and installation of vehicle charging infrastructure. | ➢ Support multi-unit developments to become EV ready.<br>➢ Deliver a Retrofit Readiness Program to provide example pathways.<br>➢ Commence a review of the legislation and regulatory systems to facilitate the energy transition for complex buildings. | Success stories demonstrating complex building electrification are being shared and showcased between industry, government and the community to enable more complex buildings to transition. |

# Business & industry

- Almost 40% of gas demand in the ACT comes from business and industry
- 93% of all appliances were assessed as “straightforward” or “minor difficulty” to electrify
- Several appliance types may need to a green gas alternative.




Technological difficulty of electrification across all categories (based on number of appliances).

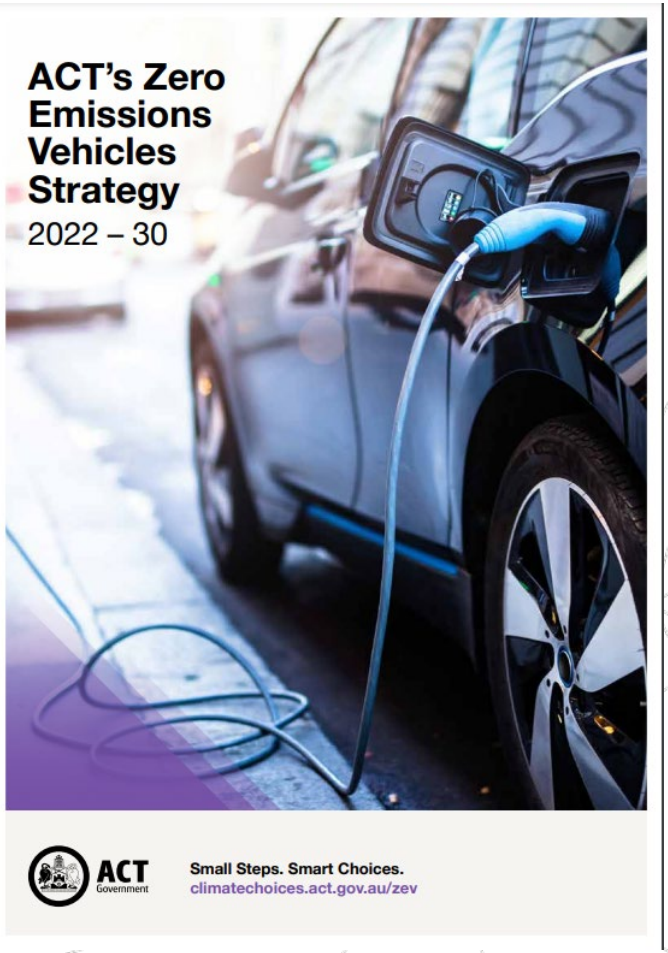
✓ **Sustainable Business Program**: free technical advice and $10,000 rebates

✓ Rebates of up to 50% total cost for businesses to transition commercial kitchens to all electric

✓Further work to be done on green gas

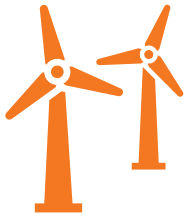
# Transport

- Ambitious ZEV sales targets for 2030 and 2035
- Financial incentives for ZEV owners
- Developing a reliable public charging network
- Provide fleet owners with rebates of up to $3000

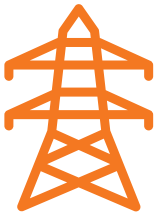


# Enabling the transition

Skills & workforce



Ensuring 100% renewable energy



Fit for purpose network

Managing the gas network

# Skills and workforce

## Existing actions to build a skilled net zero workforce

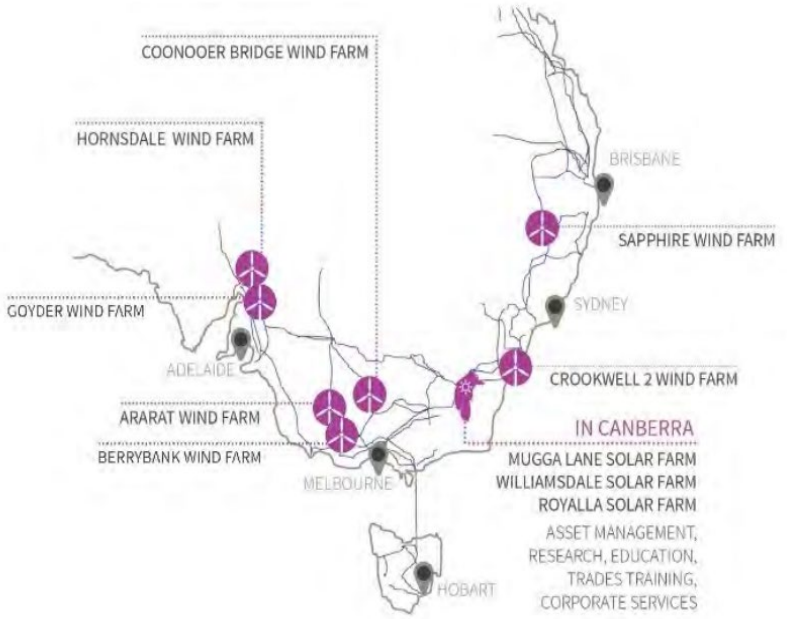
- ✓ Funded training programs through **Canberra Institute of Technology (CIT)** profile funding, the User Choice Australian Apprenticeships subsidies, Skilled  Capital and Fee Free TAFE.
- ✓ Promoted Australian School-based Apprenticeships and Australian Apprenticeships as a valuable pathway into VET, further study and employment by engaging with existing and prospective VET students.
- ✓ Developed industry-specific skills action plans that focus on attracting new students to critical industries, improving training quality, opportunities and innovation, and upskilling existing workers to meet future challenges, including the energy transition.
- ✓ Signed the five-year National Skills Agreement (NSA) between the Australian, state and territory governments.

| Challenges | Next steps | Outcomes for 2030 |
|---|---|---|
| Many skills required for the transition are in short supply. Some workers will gradually experience less demand for their skills, such as gas fitters. | ➢ Target training subsidies to priority trades that support the energy transition<br>➢ Scope the design of a Future Energy Skills Hub at the Canberra Institute of Technology. | Skills crucial to the transition, such as electrical trades, construction workers and engineers are available to homes and businesses when they are needed. Workers experiencing disruption have pathways for diversifying their skills. |

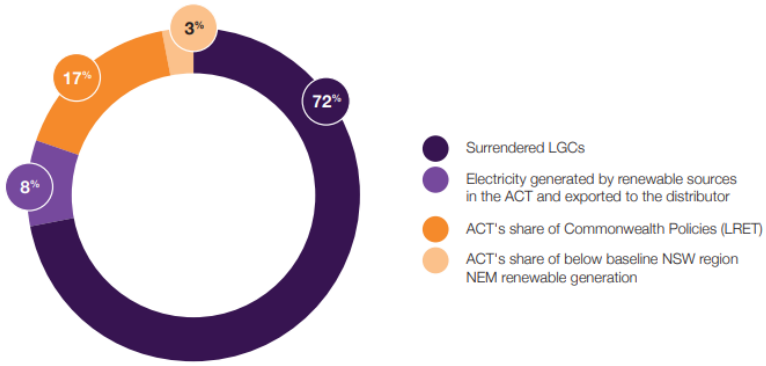
# Ensuring 100% renewable electricity for the ACT

- Most of ACT's electricity will continue to be imported from the National Electricity Market (NEM).
- The renewable electricity target is legislated so the ACT must maintain 100% renewable electricity every year from 2020.
- The ACT achieves its 100% renewable electricity primarily through its Large-scale Feed-in Tariff (FiT) Scheme.

**Map of ACT-supported renewable electricity generation**




**100% Renewable Energy Target Acquittal**



# Fit for purpose electricity network

ACT's network will need to accommodate a growing population, more demand and more consumer energy resources

- ✓ Rollout of smart meters
- ✓ Review local regulatory and technical requirements
- ✓ Continue work on national reforms e.g. Consumer Energy Resources Roadmap
- ✓ Investigate role in future battery projects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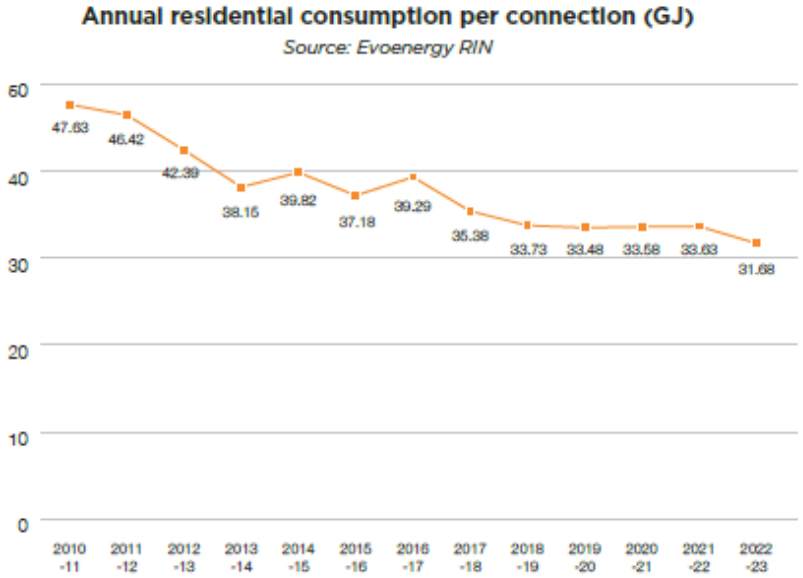
https://www.canstarblue.com.au/electricity/brands/evoenergy/

# Managing the gas network




**Next steps: Making a plan to decommission the gas network**

- Developing policy and regulatory frameworks to support safe, efficient and equitable decommissioning of the gas network.
- Efficient, safe and lowest cost gas service abolishment and network decommissioning
- Planning and providing visibility for consumers: no surprises