



ACT
Government

CANBERRA 100% RENEWABLE

LEADING INNOVATION
WITH 100% RENEWABLE
ENERGY BY 2020



RENEWABLE ENERGY BY 2020

CANBERRA IS POWERING FORWARD TO 100% RENEWABLE ENERGY BY 2020, LEADING NATIONAL ACTION ON CLIMATE CHANGE WHILE CREATING NEW JOBS IN SUNRISE INDUSTRIES.

With 640MW of renewable energy already contracted, 100% renewable energy is now secure.

With exciting new initiatives in energy storage and zero-carbon transport, our journey is just beginning.

HOW DOES THE GOVERNMENT'S REVERSE AUCTION PROGRAM WORK?

The ACT pioneered an innovative 'reverse auction' process in Australia to ensure residents get the best value for their renewable energy. The four reverse auctions held for large-scale solar and wind from 2012 to 2016 are underpinned by the *Electricity Feed-in (Large-scale Renewable Energy Generation) Act 2011*.

A reverse auction means companies compete to offer renewable energy at the lowest cost (but biggest benefit) to Canberra, rather than the usual auction process where the highest price is considered. Auction bids are evaluated on their overall value for money by considering the feed-in tariff (FiT) price, risk, community engagement and local investment benefits.

The FiT is paid on a monthly basis by the ACT's electricity distributor, ActewAGL Distribution, on a 'contract for difference' basis. ActewAGL Distribution pays the electricity generator the difference between the generator's FiT price for each MWh of renewable electricity generated and the value of that MWh in the wholesale electricity market. If the market value is below the FiT price, the distributor will pay the generator a top-up amount. If the market price is higher than the FiT price, the distributor will be paid the difference—and the savings passed on to ACT consumers.

FiT prices are fixed for 20 years and not indexed to inflation, so that as wholesale price of electricity increases over time, FiT payments go down and savings go up.

All the renewable energy certificates associated with the generation are transferred to the Territory to ensure additional carbon abatement in the electricity sector.



Ararat Wind Farm

SUPPORTING A 100% RENEWABLE ENERGY GRID

Transitioning the national grid to 100% renewable energy will require innovation in technology, regulation and new business models – with low cost smart energy storage being a vital missing link.

The ACT Next Generation Energy Storage Program is supporting the roll-out of 36 MW of smart solar battery storage systems in more than 5,000 homes and small businesses. These batteries will not only reduce the demand on the grid, but they will also collect valuable data for use by local researchers and businesses.

As a first mover in energy storage, the ACT economy is well placed to thrive in this multi trillion dollar global industry.

BE PART OF THE JOURNEY

With innovations like solar and battery storage, new energy efficient devices and even more competition between energy retailers, Canberrans have never had more choice and control over their energy usage.

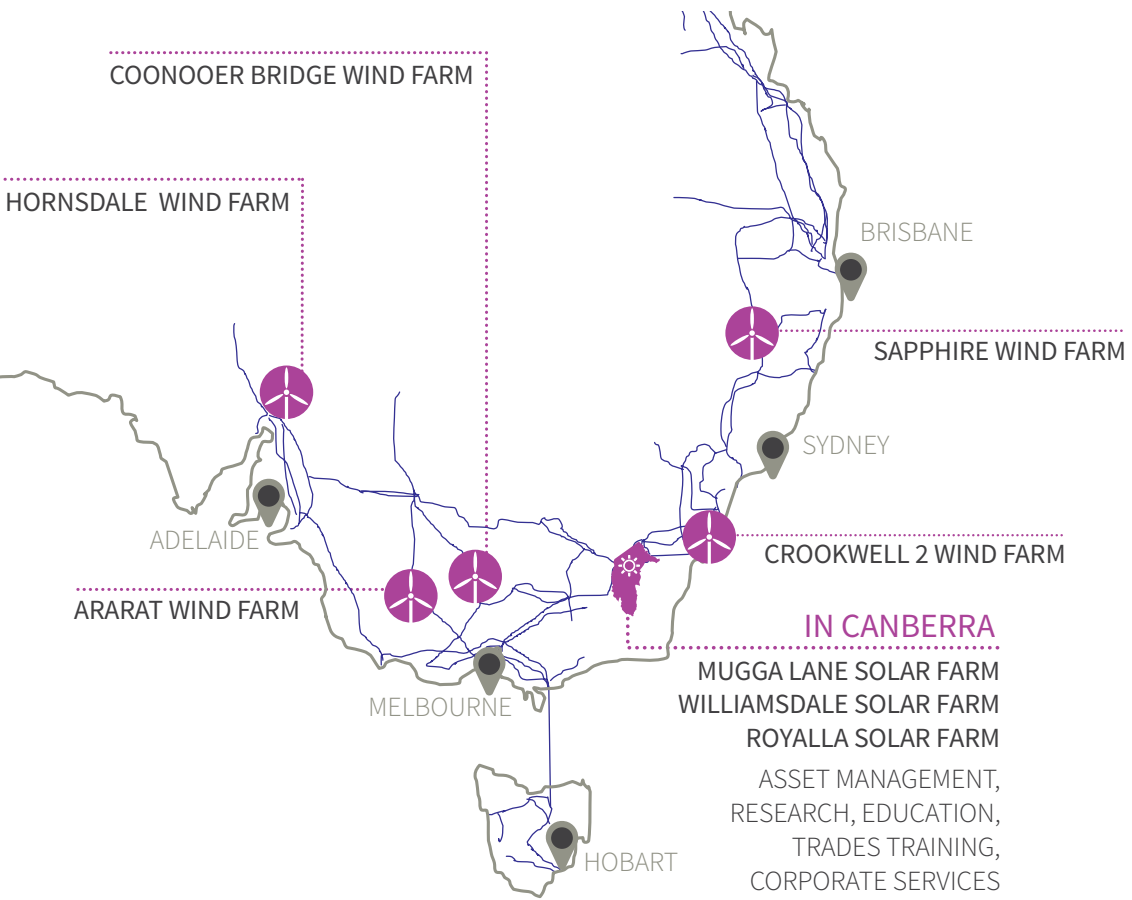
While our community is leading the nation on climate change action, there are also some easy things you can do to reduce greenhouse gas emissions and save money.

Check out practical and free online tools, services, guides, programs and tips that cover what you can do at home, work, school and in the community.

For more details visit actsmart.act.gov.au



LOCATION OF CANBERRA'S WIND AND SOLAR FARMS WITHIN THE NATIONAL ELECTRICITY MARKET



309 MW HORNSDALE WIND FARM

Developer	Neoen and Megawatt Capital
Capacity factor	45.5%*
Turbines	99 (total)
Generation	1,232,566 MWh/year*
FiT Price	\$80.70*

*Weighted average across 3 stages

80.5 MW ARARAT WIND FARM

Developer	RES Australia
Capacity factor	38.5%
Turbines	27
Generation	271,700 MWh/year
FiT Price	\$87/MWh



19.4 MW COONOOER BRIDGE WIND FARM

Developer	Windlab Limited
Capacity factor	48.2%
Turbines	6
Generation	81,856 MWh/year
FiT Price	\$81.50/MWh

100 MW SAPPHIRE WIND FARM

Developer	CWP Renewables
Capacity factor	39.9%
Turbines	32
Generation	349,703 MWh/year
FiT Price	\$89.10/MWh

91 MW CROOKWELL 2 WIND FARM

Developer	Union Fenosa
Capacity factor	38.1%
Turbines	28
Generation	304,099 MWh/year
FiT Price	\$86.60/MWh

13 MW MUGGA LANE SOLAR FARM

Developer	Maoneng Australia
Capacity factor	19.6%
Solar panels	50,000
Generation	22,360 MWh/year
FiT Price	\$178/MWh

7 MW WILLIAMSDALE SOLAR FARM

Developer	Impact Investment Group
Capacity factor	24.2%
Solar Panels	26,100
Generation	14,855 MWh/year
FiT Price	\$186/MWh

20 MW ROYALLA SOLAR FARM

Developer	Fotowatio Renewable Ventures (FRV)
Capacity factor	21.5%
Solar Panels	83,000
Generation	37,609MWh/year
FiT Price	\$186/MWh





SECURING LOCAL INVESTMENT

International and home-grown renewable energy companies are positioned to thrive in the new energy economy, with Canberra as their base.

QUICK FACTS:

- In 2015, global investment in **renewables was double that for new coal and gas** generation combined
- Canberra has the **fastest growth rate of renewable energy jobs** in Australia
- **Three of Australia's seven largest solar farms** are around 30 minutes drive from Canberra's CBD
- **Four national and international wind companies have established** their headquarters in Canberra
- Canberra is **leading the nation in clean energy education and training** through CIT and ANU
- Each auction run by the ACT has delivered **record low prices for renewable energy** in Australia
- The ACT is rolling out **smart battery systems and investing in world-leading research and development**
- We are **leading technology demonstration** in new areas such as zero-carbon hydrogen transport and hydrogen power storage
- The ACT's renewable energy generators have **192 wind turbines and over 159,000 solar panels**
- The ACT's renewable energy program is directly contributing over **\$500 million local economic benefits**

Image on front cover: Hornsdale Wind Farm

