



Clean Energy Capital Public support for ACT clean energy leadership

The ACT government has set leading policies for clean energy and fossil fuel divestment. Public polling reported here shows high levels of support, both within the ACT and around the country.

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Summary

The ACT government has set very ambitious policies on clean energy. Building on a 90 per cent renewables target for 2020, earlier this year he Chief Minister announced a 100 per cent target for renewable energy by 2025, and a commitment to start divesting from fossil fuel companies. The government has already made substantial moves towards both goals.

In an area of policy prone to controversy, supporters of the ACT's policies may be concerned they lack support from the public. But as this note reports, public opinion surveys suggest the policies are popular both in the ACT and across the country.

- Three in four Canberrans surveyed (78 per cent) said they support the 100 per cent renewables target, a majority strongly supporting it.
- Three in four (75 per cent) said they were willing to pay more on their bills to achieve this target.
- Almost two in three (62 per cent) said they would be willing to pay \$5 per week more on household electricity.
- Almost three in four Australians from outside of Canberra (72 per cent) said they wanted a similar policy in their own state.
- More than half of Canberrans (54 per cent) support the ACT government divesting from fossil fuels, while around one in five oppose (19 per cent).

The ACT government policies exceed the policies of the bigger states, setting important precedents in clean energy policy in Australia. In an appendix, this note briefly outlines ACT government policies and compares them with selected other state and city targets.

The ACT government policies are not just setting a precedent but have strong support from Canberrans. The rest of the country wants to see this sort of leadership in their own state. The ACT's leading position on clean energy appears to be the envy of the rest of the country.

The ACT should be looking forward to the next steps 'beyond fossil fuel divestment', supporting innovative technology and start-ups, battery management, and access for low income Canberrans. The paper finishes with a report back from a recent panel hosted by The Australia Institute.

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Public support for the clean energy capital

The ACT government currently has a policy for 100 per cent renewables by 2025 and divesting from fossil fuels.

Later sections of this report outline these policies and compare them briefly with the targets of other jurisdictions. The ACT policies are clearly ambitious by comparison with other states and territories.

But taking action on climate change has been controversial in recent years. What do people think of the ACT policies? Are people willing to pay a little more on their bills if that is needed? And what do people from other states think about the ACT government's policies?

POLLS

The Australia Institute commissioned two sets of polling on clean energy and divestment:

- On 15 September ReachTEL surveyed Canberrans:
 - o 731 residents of the federal electorate of Fraser and
 - o 717 residents of the federal electorate of Canberra.
- Over a week in later September and early October, Research Now surveyed
 1407 people across Australia, taking a nationally representative sample by age, gender and state.

Detailed results are contained in an appendix.

RESULTS

Renewables

In all ACT questions, there was little difference between the two electorates.

The ACT 100% renewable energy target was very popular within the ACT.

Almost eight in ten Canberrans surveyed (78 per cent) support the target.

- Six in ten said they strongly support it (60 per cent).
- Only one in ten oppose the target (10 per cent).

The ACT's 100% renewables target was also very popular elsewhere in the country.

The polls also asked how much Canberrans would be willing to pay to achieve the 100 per cent renewables target.

- Three in four Canberrans (75 per cent) said they were willing to pay more.
- Almost two in three (62 per cent) said they would be willing to pay at least \$5 per week more on household electricity.¹
- More than a third (38 per cent) said they would pay at least \$10 a week more.

Most Australians surveyed, when told about the target, said they wanted a similar policy in their own state.

- Seven in ten Australians (72 per cent) said they wanted a similar policy in their own state.
- Over a third strongly support this proposal.
- Less than one in ten disagreed (8 per cent).
- Results were similar across States.

Fossil fuel divestment

Regarding fossil fuel divestment, support was much higher than opposition, although lower than for the renewable energy target. Nonetheless, most people supported fossil fuel divestment in the ACT.

- More than half of Canberrans (54 per cent) support the ACT government divesting from fossil fuels.
- Around one in five oppose (19 per cent).
- Around a quarter said they were not sure (27 per cent)

¹ This is the average household cost level estimated by the ACT government for the 90 per cent target in 2020, delivered through the large scale feed in tariff.

Corbell, S (2013) "ACT sets 90% renewable target in law" Press Release

http://www.cmd.act.gov.au/open_government/inform/act_government_media_releases/corbell/2013/act-sets-90-renewable-energy-target-in-law7

The increase would vary with household energy use.

DISCUSSION

The ambition of current ACT government policy on renewables and fossil fuel divestment is supported by most people of Canberra, according to these survey results.

When told about the ACT's 100 per cent renewables target, most people in other states support a similar policy in their own state. ACT's leading position on clean energy is the envy of the country.

Most Canberrans would be willing to pay \$5 or more a week on household bills to achieve the renewable energy target. This appears the likely cost of renewable energy under the scheme. The government could consider ways to increase local ownership and reduce energy use to reduce the cost of reaching the target.

While the ACT can reduce its climate impacts through increased use of renewable energy, by setting a leadership example it may also help motivate more ambitious transitions in other jurisdictions, including by innovating with policies. Similarly, fossil fuel divestment can send a powerful signal this signal.

With strong support for ambitious state level renewable targets, and a federal government that appears unlikely to promote new renewable energy any time soon, state level targets and policies will be important ways to increase ambition on renewable energy in Australia.

Indeed, in terms of its leadership signal, 100 per cent renewables may be 'more than the sum of its parts'. That is, more than 10 per cent more powerful than the 90 per cent target. The 100 per cent target clearly expresses the simple point that there is a prosperous society beyond fossil fuel power and that concerted government action can bring it about.

To put it another way, the coal industry wants people to believe that a society beyond coal is either economically disastrous or far off, but the ACT is showing it is possible in the near term. Mike Henry, President of Coal at BHP, recently complained "there is a widespread public view that coal use will be phased out over the next 10 to 20 years in favour of renewables." Canberra is getting on with building that future. It shows the the obstacles are mainly political, and examples like Canberra can help overcome those barriers elsewhere.

² Henry, M (2015) "Mike Henry Speaks at the American Chamber of Commerce" 18 September http://www.bhpbilliton.com/investors/reports/mike-henry-speaks-at-the-american-chamber-of-commerce

ACT leadership on clean energy

GREENHOUSE GAS EMISSIONS REDUCTION TARGETS

The ACT has some ambitious greenhouse gas emission reduction targets. Under the *Climate Change and Greenhouse Gas Reduction Act 2010,* the ACT government has set targets for

- "40% reduction of 1990 levels by 2020
- 80% reduction of 1990 levels by 2050";³
- "zero net greenhouse gas emissions by 2060".⁴

The government sets 'Action Plans' outlining how it intends to meet this target.

At the time the Canberra Liberals opposition supported a 30 per cent emissions reduction target for 2020; currently they are reassessing this target.⁵

RENEWABLE ENERGY TARGET

Just over half of current emissions in the ACT are from electricity use. (Note that almost all of these emissions occur from generation facilities outside of the ACT.)

To reduce emissions from electricity, in 2013 the ACT government introduced a target for 90 per cent renewables by 2020.⁷

Recently, the ACT government announced it would extend the renewable energy target to 100 per cent by 2025. This renewable energy is addition to renewables driven under national policy. 9

³ Climate Change and Greenhouse Gas Reduction Act 2010 http://www.environment.act.gov.au/__data/assets/pdf_file/0019/602551/Canberras-key-climate-change-policies-and-programs 22May.pdf

⁴ Ibid.

⁵ http://www.abc.net.au/news/2015-08-22/canberra-to-run-on-100pc-renewable-energy-by-2025/6716336

⁶ http://www.environment.act.gov.au/__data/assets/pdf_file/0019/602551/Canberras-key-climate-change-policies-and-programs_22May.pdf

⁷http://www.cmd.act.gov.au/open_government/inform/act_government_media_releases/corbell/2013/act-sets-90-renewable-energy-target-in-law7

⁸ http://reneweconomy.com.au/2015/act-government-aims-for-100-renewable-energy-by-2025-2025

⁹ The ACT government will keep the Renewable Energy Certificates, so that they cannot be used by retailers to meet obligations under the national Renewable Energy Target.

While Australian federal parliament has recently reduced the national Renewable Energy Target, under current policy Australian Parliament House itself will be 100% renewably powered in 10 years' time.

Meeting the renewable energy target

Much of the renewable energy required for meeting the target is to be secured by 'contract for difference feed-in-tariffs' set at levels determined by a 'reverse auction' process. This provides certainty to the proponents and minimises costs for government.¹⁰

The ACT government estimates the 90 per cent target achieved through the feed-intariff will contribute \$5 a week to average household electricity bills in 2020. ¹¹ This may decline in later years as wholesale prices increase, reducing the gap the government has promised to cover.

Renewable energy will also come from rooftop solar owned by households, businesses and local organisations, backed up by battery storage. Access to solar and storage can reduce costs for consumers and reduce the need for large scale feed-in-tariffs.

Recent solar installation announcements within the ACT include on the Royal Mint, ¹² Questacon, ¹³ Canberra Hospital ¹⁴ and Amaroo School. ¹⁵ The latter two mid-scale projects involved ACT government support. There are also proposals for locally owned solar co-operatives, under a dedicated feed-in-tariff auction for 1MW of capacity. ¹⁶ This would allow people who cannot put solar on their rooftops to own part of a solar farm.

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¹⁰ The ACT government feed-in-tariff reverse auction involves the government tendering for a certain amount of renewable energy. Proponents make bids, based on prices at which they think they could profitably operate the proposed generation capacity. For the successful bid, the government promises to make up the difference between the proposed price and market prices. As wholesale prices increase, the 'difference' and thus costs to government will decrease.

¹¹ Corbell, S (2013) "ACT sets 90% renewable energy target in law"

¹² Vorrath, S, (2015) Origin awarded solar contract for royal mint with 15 year PPA" *Reneweconomy*, 25 June http://reneweconomy.com.au/2015/origin-awarded-solar-contract-for-royal-mint-with-15-year-ppa-25578

¹³ Questacon (2015) "Questacon goes solar" Press Release https://www.questacon.edu.au/business/media-centre/news-and-media/questacon-goes-solar-sustainable-energy

¹⁴ Raggat, M (2015) Canberra Hospital to get one of the nation's largest solar rooftop arrays" *Canberra Times* 14 August http://www.canberratimes.com.au/act-news/canberra-hospital-to-get-one-of-the-nations-largest-solar-rooftop-arrays-20150814-giz7fh.html

¹⁵ Kelly, E, (2015) "Amaroo School to gleam under ACT's largest rooftop solar system" *Canberra Times*, 24 September http://www.canberratimes.com.au/act-news/amaroo-school-to-gleam-under-acts-largest-rooftop-solar-system-20150924-gjujsf.html

¹⁶ ACT Government (2015) "Community Solar" http://www.environment.act.gov.au/energy/community_solar

FOSSIL FUEL DIVESTMENT

While the ACT government was pursuing ambitious clean energy targets, its \$2 billion investment fund was also exposed to investments in fossil fuel companies.

Recently the ACT government has announced it will begin divestment from fossil fuel companies. Divestment campaigning organisation 350.org claims this made the ACT's the 350th divestment announcement in the world.¹⁷

While a motion passed by the ACT ALP conference stated support for divestment of the 'Carbon Underground 200'¹⁸ largest traded fossil fuel companies, the Chief Minister Andrew Barr stated his government would divest from 60 fossil fuel companies who do not meet certain standards.¹⁹

Nonetheless, based on its public disclosures of holdings, it is clear the ACT government is rapidly divesting from many fossil fuel companies. Since making the announcement, it has sold shares in 30 fossil fuel producing companies. ²⁰ Note the government does not disclose the weight of its remaining exposures.

Why divestment?

While fossil fuel divestment is unlike a renewable energy policy in one sense – it is more symbolic than having a direct financial or environmental impact – this symbolism can have powerful flow on effects. The potency of divestment symbolism was shown by the month of controversy over the Australian National University's small divestment decision in 2014. Divestment helps build political support for keeping fuel in the ground, as the science makes clear is necessary.

Moreover, previous polling by the Australia Institute suggests that many people (two in five) say ethical investment decisions on fossil fuels by local governments, universities and religious groups would make them more likely to avoid fossil fuels in

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¹⁷ 350.org Australia (2015) "ACT Government to divest from fossil fuels" http://350.org.au/news/act-government-to-divest-from-fossil-fuels/

¹⁸ Fossil Free Indexes (2015) "The Carbon Underground 200" http://fossilfreeindexes.com/research/the-carbon-underground/

¹⁹ Raggatt, M (2015) Andrew Barr commits ACT government to dumping fossil fuel investments" *Canberra Times*, 22 August http://www.canberratimes.com.au/act-news/barr-commits-to-dumping-fossil-fuel-investments-20150822-gi5dro.html

²⁰ McIllroy T (2015) "ACT government fossil fuel divestment speed wins praise from environmental campaigners" Canberra Times, 5 November http://www.canberratimes.com.au/act-news/act-government-fossil-fuel-divestment-speed-wins-praise-from-environmental-campaigners-20151105-gkr8wh.html

²¹ Swann, T (2014) "By the numbers: The Fin's divestment obsession" *Crikey*, 6 November http://www.crikey.com.au/2014/11/06/by-the-numbers-the-fins-divestment-obsession/

their own investment choices.²² Such consumer trends could contribute to broader shifts in attitudes about energy and larger scale shifts in capital, for example new decisions by banks and by superannuation funds.

Finally, action on carbon risk and fossil fuels at jurisdictions like the ACT can have an impact on culture and expectations within the sector. If asset managers like the Future Fund start to follow this lead, it could have a substantial impact on markets in Australia, both through setting an example but possibly also, at this scale, financially.

²² Swann, T (2015) *Leading By Degrees,* The Australia Institute, http://www.tai.org.au/content/leading-degrees-universities-and-fossil-fuel-divestment

What other States are doing

Action by the ACT government on clean energy and fossil fuel divestment stands clearly at the lead of jurisdictions across Australia, and indeed the world.

RENEWABLE ENERGY TARGETS

Australian states have long had their own climate and renewables policies, however, over the last decade, many state governments have reduced ambition or retreated from this area of policy. With the federal government was taking steps towards pricing carbon, backed up by the federal Renewable Energy Target (RET), state and territory governments agreed to leave emissions reduction and renewables policy to the federal government.²³

With the repeal of the carbon price and the lowering of the RET, and growing political popularity of renewables, some state governments are newly reconsidering local renewables policy. However, the level of ambition in other states, measured in terms of the percentage target, is far lower than in the ACT:

- Queensland has recently committed to a 50 per cent renewable target by 2030.²⁴
- Victoria is reviewing its climate and renewables target, setting a 20 per cent renewables target by 2020 as its baseline for this review.²⁵
- New South Wales does not have its own renewables target, although it does have some renewables support policies.²⁶
- South Australia has a 50 per cent renewables target by 2025.

²³ COAG (2008) "COAG Principles for Jurisdictions to Review and Streamline their Existing Climate Change Mitigation Measures" https://www.coag.gov.au/sites/default/files/20081129 complementarity principles.pdf

²⁴ Parkinson, G (2015) "Queensland commits to 50% renewable target by 2030" *Reneweconomy*, 14 May http://reneweconomy.com.au/2015/queensland-commits-to-50-renewable-target-by-2030

²⁵ Edis, T (2015) "Vic Gov't targets at least 20% renewables by 2020, but how?" *Climate Spectator*, 21 August http://www.businessspectator.com.au/article/2015/8/21/renewable-energy/vic-govt-targets-least-20-renewables-2020-how

²⁶ Glanville, B (2015) "NSW 'at bottom of pack' for renewable energy; Government says it's committed to clean projects" ABC, 30 August http://www.abc.net.au/news/2015-08-30/nsw-lagging-behind-in-renewable-energy/6733366

Note that much of the considerable existing renewable generation in South Australia is driven by the national Renewable Energy Target.²⁷ The ACT's 90 per cent target is unconditional on federal policy.

By contrast, many Australian cities have ambitious emissions and clean energy plans.

Melbourne and Adelaide city councils are currently competing to be first to become carbon-neutral, with targets for 2020.²⁸ However Melbourne city's target does not currently have policies behind it to make it credible.²⁹

DIVESTMENT

The ACT government is the only Australian state or territory that has made a fossil fuel divestment announcement.

Many local jurisdictions have made such announcements. 350.org reports 10 Australian local councils have made some form of divestment announcement, including Newcastle City, home to the world's biggest coal port, and recently the City of Melbourne.³⁰

²⁷ Edis, T (2014) "South Australia's Do Nothing Renewables Policy" Climate Spectator 24 September, http://www.businessspectator.com.au/article/2014/9/24/policy-politics/south-australias-do-nothing-renewables-

Parker, J, Langford, C (2015) "Australian Governments Commit to Renewable Energy" *Jones Day* <a href="http://thewritestuff.jonesday.com/cv/55c1cca2a8a4d36dbb7b5649148398323e00eb2b/p%3D2490570?utm_source=Mondaq&utm_medium=syndication&utm_campaign=View-Original

²⁹ Edis, T, (2015) "My error: Council announces ambitious target and I believed it" *Climate Spectator* 20 November http://www.businessspectator.com.au/article/2015/11/20/renewable-energy/my-error-council-announces-ambitious-target-and-i-believed-it

³⁰ Go Fossil Free (2015) "Commitments" http://gofossilfree.org/commitments/

What could be next for the ACT?

A leading position on clean energy is a position from which to ask what is next. Of course, current policies need to be reviewed to ensure they are being implemented effectively. Moreover, in this fast moving area, there are many ways for the ACT government to extend its lead and make this work best for Canberra.

In November 2015, The Australia Institute hosted a panel at the Progressive Canberra Summit.³¹ An early version of this report was used as the basis of a conversation about what steps could be next. The panel discussion included short presentations from local experts.

Dean Spaccavento, Chief Product Officer of Reposit Power, a Canberra based clean tech start up, spoke about averting the 'utility deathspiral' with battery management technology.

The deathspiral is when increasing power prices make solar and eventually storage increasingly attractive, but the less power that is used from the grid, the higher prices go as grid operators are forced to make their returns from a shrinking base of power demand. The end result may be that the grid, a valuable asset, loses its value as households defect from the grid.

Reposit hopes to address this through its technology, turning the grid into a peer-to-peer energy trading platform. Reposit allows batteries to maximise the value of the power it stores and sells into the grid by trading in real-time markets. Dean called this the 'robin hood' of energy markets – stealing from coal and giving to households – and urged the ACT government to support this sort of technology. Dean also spoke of the need to address social obstacles to attracting new talent for start-ups in Canberra, such as providing avenues for "frustrated public servants" to take a risk outside of the public service.

Lawrence MacIntosh is project leader at SolarShare, a locally owned solar farm cooperative, and working on Renewables for All. He spoke about ensuring solar and storage is accessible to all Canberrans, including those on low incomes, drawing on a recent workshop with social service providers and others in Canberra.

For those who are without spare cash to invest in solar, government loans secured against property can be a low cost way to provide capital. This is already happening in

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³¹ www.progressivecanberrasummit.org.au/session/panel-clean-energy-capital/

many other jurisdictions. Such a scheme has been operating for years in California, where the mechanism is used for solar and for energy efficiency³² and is now being expanded across the USA.³³ Repayments on such loans could be made income contingent, so that you only repay when it won't cause hardship.³⁴ Lawrence also explained that for those who do not own their rooftop, 'virtual net metering' and 'solar gardens' are options for allowing people to buy low cost solar power generated on other property. This requires regulatory change, which the ACT government could consider.

Steve Gibbs, Chair of Australian Ethical Investment, spoke on "Beyond fossil fuel divestment". He discussed carbon tilts and neutrality across the portfolio, thematic investing in cleaner sectors, greater transparency, and advocacy within the financial sector for enhanced performance. Steve noted the divestment movement has sharpened the attention of many in the sector and forced work on standardising frameworks. Active and public ACT leadership in institutional investing could influence other public funds to take greater steps.

³²HERO (2015) "HERO Financing" https://www.heroprogram.com/

The White House (2015) "FACT SHEET: President Obama Announces New Actions to Bring Renewable Energy and Energy Efficiency to Households across the Country" 24 August https://www.whitehouse.gov/the-press-office/2015/08/24/fact-sheet-president-obama-announces-new-actions-bring-renewable-energy

³⁴ Baldwin K.G.H., Chapman, B, Raya, U (2015) "Using Income Contingent Loans for the Financing of the Next Million Australian Solar Rooftops" CCEP Working Paper 1508 Aug 2015 https://ccep.crawford.anu.edu.au/sites/default/files/publication/ccep_crawford_anu_edu_au/2015-08/ccep1508.pdf

Appendix - Detailed results

ACT SURVEYS

The ACT Government has recently announced its intention to source 100 per cent of Canberra's electricity from renewable sources by 2025. Do you support or oppose this policy?

	TOTAL SUPPORT	TOTAL OPPOSE	Strongly Support	Support	Neutral	Oppose	Strongly Oppose
Canberra	76%	11%	57%	19%	14%	5%	6%
Fraser	81%	10%	60%	21%	9%	3%	7%
ACT-Wide	78%	10%	58%	20%	11%	4%	6%

If there is a cost associated with reaching the 100% renewable target, how much extra per week would you be willing to pay for your household electricity?

	TOTAL \$5 or less	TOTAL pay more	More than \$10 a week	Around \$10 a week	Around \$5 a week	Around \$2 a week	Not willing to pay extra
Canberra	61%	73%	16%	23%	22%	12%	27%
Fraser	63%	77%	16%	22%	25%	14%	23%
ACT-Wide	62%	75%	16%	22%	24%	13%	25%

The ACT Government has recently announced that they will sell their investment fund shares in fossil fuel companies. Do you support or oppose this decision?

	TOTAL SUPPORT	TOTAL OPPOSE	Strongly Support	Support	Neutral	Oppose	Strongly Oppose
Canberra	51%	20%	35%	17%	29%	11%	9%
Fraser	57%	18%	39%	18%	25%	7%	11%
ACT Wide	54%	19%	37%	17%	27%	9%	10%

DETAILED RESULTS - NATIONAL SURVEY

Note including only states where n=100 or greater.

	TOTAL SUPPORT	TOTAL OPPOSE	Strongly support	Support	Neither support or oppose	Oppose	Strongly Oppose
Australia-wide (ex ACT)	72%	8%	37%	35%	20%	5%	3%
New South Wales	72%	10%	34%	38%	18%	6%	4%
Queensland	72%	9%	38%	34%	19%	6%	3%
Victoria	71%	7%	39%	31%	23%	5%	2%
South Australia	72%	7%	32%	41%	21%	5%	2%
Western Australia	78%	4%	40%	38%	18%	1%	2%