



Submission#1 – Towards Zero Net Emissions in the ACT

23 February 2018

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Please note this is an initial submission and an additional submission will be developed in regard to the measures that will take us to zero net emissions once the economic modelling is released – due on 1 March 2018.

Please also note this submission has been developed in collaboration with our member groups: Australian Youth Climate Council (AYCC), Beyond Zero Emissions, Canberra Environment Centre, Climate Action Canberra, Frank Fenner Foundation, SEE-Change and 350Canberra; as well as with Australian Religious Response to Climate Change.

We will outline our views on the need for a very vibrant community engagement process in our second submission, noting the need for cross-sectoral engagement, the importance of addressing equity and disadvantage, as well as the special role of our youth and the traditional owners of these lands.

1. Overview

Our vision is for: a livable, friendly and sustainable city doing its share for a climate friendly future, with our various and diverse communities working together in partnership to get the ACT to zero net emissions in a transition that is fair, socially just, economically viable and respectful to nature.

We need to do this for our children and their children, for a livable climate-friendly future for all species. We are proud to take local action to address a global issue.

Recommendation 1.

Support the ACT government continuing and extending its strong local, national and international leadership role on action to achieve zero net emissions

Recommendation 2.

Support for a series of 5 yearly strategy plans to urgently move the ACT to zero net emissions in a way that is fair, socially just, economically viable and respectful to nature.

The people's pathway to zero emissions – Canberra

The Conservation Council with its member groups and other local civil society groups welcome the opportunity to comment on the ACT's Climate Strategy for a Net Zero Emissions Territory Discussion Paper.

Canberra is a national and international leader on local action to address damage to our climate and we are proud of this. We are leaders because:

- we have a 100% renewable energy [electricity] target by 2020
- we have a 40% GHG reduction target by 2020
- we have a plan and contracts in place to deliver this
- we have a target of being zero net emissions by 2050
- we have tri-partisan support for the above.

Our climate policy is working. In 2010 the ACT Government set legislated greenhouse gas reduction targets and started to invest in renewable energy. As at June 2017 already over 32% of our electricity is

There is a need for urgent action on climate change

We cannot delay action on climate change – it is no longer a future problem

- already in Canberra we have significantly more days over 35 degrees Celsius as a function of climate change
- these days increase the likelihood of illnesses and heat-related deaths with the elderly particularly vulnerable
- already 50% of the beautiful corals of the Great Barrier Reef have been destroyed due to coral bleaching and recovery will take many decades
- already the level of carbon dioxide in the atmosphere is higher than at any time in the past 5 million years and continues to rise
- already the number of [extreme weather events](#), cyclones and other storms, rainfall, heat and bushfires is unprecedented.

from renewable sources and we are on track to deliver 100% renewable electricity by 2020. Our greenhouse gas emissions have dropped over 12% since 2010-2011.

We are going from strength to strength. This local momentum for local action on climate change has been community driven – from raising awareness by environment groups going back over two decades to the November 2015 People's Climate March prior to the Paris meeting for the United Nations climate summit.

In November 2015 we joined cities around the world, for the biggest day of people-powered climate action in global history. Hundreds of thousands turned out globally and in Canberra we had 10,000 people – Canberra's largest ever climate change rally and it was the largest rally per capita of major Australian cities. A key factor of this turnout was that it was attended by a diverse range of peoples, including firefighters, faith communities, unions and workers, farmers, health professionals, business people, artists and musicians. It was a colourful and family friendly event.

If we are to develop and implement a long term zero net emissions plan it must be embraced by the ACT community, by a wide range of organisations across sectors and receive continuing support from all our major political parties. Effective community ownership will be an essential part of delivery of our local and global zero net emissions goal.

We want to work with the whole Canberra community to develop and build ownership to ensure our local community is engaged and committed to a shared vision of achieving zero net emissions – which is fair, socially just, economically viable and respectful of nature.

We celebrate that Canberra is well on the path to reducing our greenhouse gas emissions. We celebrate our existing greenhouse gas emission reduction and renewable energy targets put us at the head of the pack in Australia and in many world comparisons. We need to do this for future generations and a liveable future for all species.



NOVEMBER 2015: 10,000 people at Canberra's largest ever climate change rally call for strong local climate action to address a global issue

It's time to build on our success. One of the highlights of the 2016 ACT election was all the parties in the Legislative Assembly – ACT Labor, Canberra Liberals and ACT Greens – supported a 100% renewable energy target by 2020, to reduce our emissions by 40% by 2020 on 1990 levels and for Canberra to become zero net emissions by 2050. We were the first Australian jurisdiction to obtain tri-partisan support for such local leadership action on climate change.

Importantly, the 2020 renewable energy target is not 'aspirational' as contracts have been put in place and hence it will be delivered. This is a great achievement and it has been built on with community support.

However post-2020 there is no plan to achieve the zero net emissions target by 2050 and there are no interim targets. Minister Rattenbury has indicated that he will bring forward development of a new strategy by the end of 2018 which will cover the years to 2019 – 2025.

We welcome the Discussion Paper as a way of starting the conversation about where we go post-2020. We note the Discussion Paper proposes a target of zero net emissions by 2045 (or earlier) – an advance of five years on our current 2050 zero net emissions target.

Yet in order to keep up with the science and to maintain our international leadership role we should consider if and how we can achieve zero net emissions earlier than 2045. It is also important that we deliver as much emission reduction earlier in order to maintain a 'safety margin' – therefore interim targets are essential.

We need to make sure our pathway to zero net emissions works for all sectors of our society – it must be a just transition. Working together we can also make it an exciting transformation. The pathway to achieving zero net emissions needs to be owned by the community and lead by tri-partisan political support with ongoing implementation by the ACT Government in partnership with the community.

The big challenge now is to ensure the new 'Strategy' delivers in line with what the science tells us is necessary, for nature, for people, is a just transition and has a broad community and political consensus. We must also build the 'social license' for ongoing action – to future-proof ongoing local action on climate change from Government inaction, changes in Ministers or changes in Government.

Global warming and climate disruption

Professor Will Steffen, member of the ACT Climate Council has developed the concept of [climate disruption](#).

In essence he says: "terms like 'global warming' and the mental images they trigger can be misleading when people attempt to understand what is happening to the climate".

He suggests the term "climate disruption, which captures the real nature of the vast array of changes, many of them abrupt and unexpected, that are occurring" he says.

He uses the term to describe why in January 2018 Penrith NSW, Australia was having its hottest day ever recorded and in America it was super cold. Cold enough to make some animals freeze and fall out of trees.

2. Targets for Zero Net Emissions

Definition of Zero Net Emissions

The term zero net emissions can mean different things to different people. However in the context of the Discussion Paper it is used as zero net GHG emissions as reported in our Greenhouse Gas Inventory. Our ACT Greenhouse Gas Inventory is consistent with national and international Greenhouse Gas methodologies and reporting. In using the ACT Greenhouse Gas Inventory as the basis for getting to zero net emissions, this means – reducing emissions from the current (2017) emissions of just under 4,000 kilo-tonnes of CO₂-e to zero.

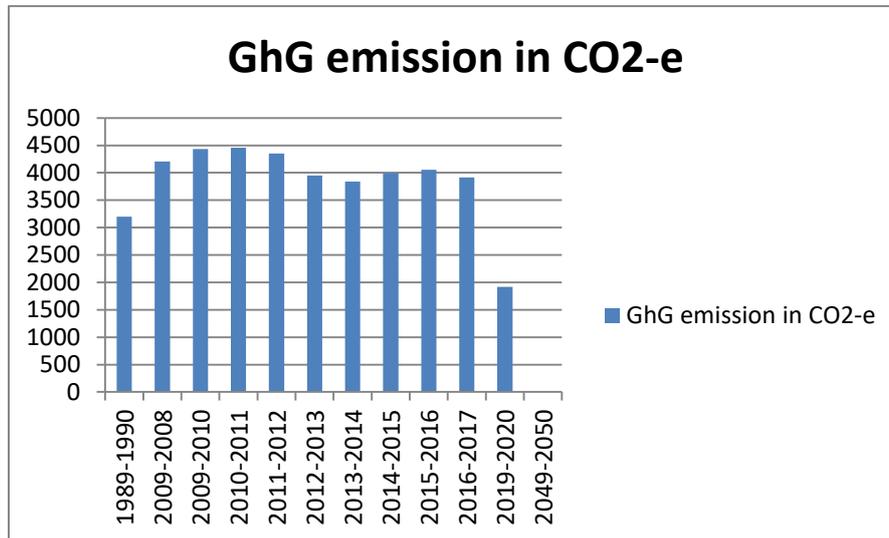


Figure One: ACT GHG emissions 1990 – 2016-17

Our current local per capita emissions are 9.64 tonnes CO₂. They peaked in 2005 at 12.72 tonnes. Our baseline year is 1990 at 11.45 tonnes per capita emissions. The ACT *Climate Change and Greenhouse Gas Reduction Act 2010* set a target of our per capita emissions peaking in 2013.

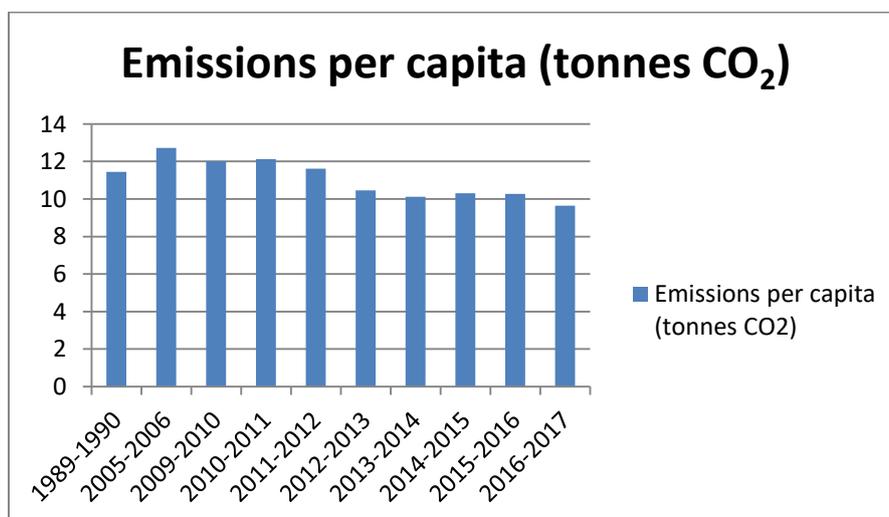


Figure Two: ACT GHG per capita emissions 1990 – 2016-17

It is important to note the Greenhouse Gas Inventory only accounts for emissions generated within the ACT (Scope One emissions and our electricity generated outside the ACT Scope Two emissions) and so therefore does not include the emissions of products and services generated outside the ACT or aviation fuel (referred to as Scope Three emissions), nor waste disposal outside of the ACT. These are accounted for in the jurisdictions where they are manufactured or in the case of aviation fuel where it is purchased, or where waste is buried or processed. So for example, a pair of pliers purchased in the ACT but manufactured in China – the GHG emission of the manufacture will be recorded in China's emissions profile.

Scope Three emissions are important as they reflect our local consumption and have significant equity ramifications across jurisdictions – whether state, national or international.

Recommendation 3.

The 'Strategy' acknowledges that it is addressing ACT 'local' emissions and not those generated outside of the ACT.

This highlights the importance of local, national and international action on consistent reporting of GHG emissions, because it means all emissions are accounted for. Likewise if we have a global target of zero net emissions then all emissions regardless of where they are generated will be accounted for.

Recommendation 4.

The ACT Government continues to use the current GHG Inventory as a key way of measuring our greenhouse gas emission reductions.

It is appealing to suggest that our local ACT Inventory be amended to include Scope Three emissions however to do so at the scale of state or national governments would inevitably be counter-productive as it would be impossible to avoid double counting. That said action is needed on addressing Scope Three emissions, particularly for a relatively affluent community such as the ACT.

Therefore we recommend that a separate strategy be developed to address emissions (Scope Three) generated outside of the ACT. For example, some policy measures to reduce external emissions could include:

- incentives for use of low emissions concrete or steel in the ACT
- incentives for use of 'sustainable' building materials
- encouraging local food production and consumption of local food
- increased product labelling of external emissions associated with manufacture and waste disposal of imported products; or
- community engagement on Scope Three emissions and ways to reduce these.

***Recommendation 5.
Recognising the importance of Scope Three emissions a separate Strategy be developed to address emissions generated outside of the ACT (Scope Three emissions).***

Tools are being developed to assist businesses determine their external Scope Three emissions and the use of such tools should be considered for business entities in the ACT. For example, the Greenhouse Gas Protocol has developed a [tool](#) for corporate entities to measure their Scope Three emissions.

There are also various consumption based reporting tools that may be able to provide individuals and the ACT community greater understanding of our complete carbon footprint. These should also be considered as part of a broader strategy to understand and reduce our Scope Three emissions while retaining the integrity of our existing GHG reporting system.

The cost and benefits and ease of use of these various tools should be assessed as part of the above proposed Strategy.

Science to inform targets

There has been growing momentum in scientific and political circles since the 1980's and 1990's to recognise the need to limit global warming to less than 2°C of pre-industrial levels. This includes obscure references in the early 1992 negotiations of the original UN Framework Convention on Climate Change (UNFCCC) agreement. However it was only in 2010, through the Cancun UNFCCC negotiations, this formally became part of the global goal to address climate change.

Importantly, through the 2015 UNFCCC Paris global climate change discussions an 'aspirational' target to limit global warming to 1.5°C was agreed whilst still recognising 2°C as an absolute maximum limit for an increase in global temperatures. While the 1.5°C target is only aspirational, it is very likely to become the future global goal. In addition the Paris Agreement also asked State parties to achieve zero net emissions (carbon neutrality) by 2050.

The ACT Climate Council [recommendations](#) which informed the Discussion Paper were based on limiting global warming to less than 2 degrees. In the context of the ACT specific situation, being already low carbon due to not having a manufacturing base, relatively low levels of land-clearing and our traditional high per capita emissions we think it is important that we work towards delivery at the lower end of the climate science spectrum – i.e. focus on ensuring our role as a local community helps us keep below the 1.5°C global warming range.

***Recommendation 6.
The international 'aspirational' goal of maintaining global temperatures increases to less than 1.5 degrees be used in determining our policy responses.***

Consideration of policy measures to inform targets

The Conservation Council has previously recommended a need for interim targets, the bringing forward of Action Plan#3, and suggested reductions of GHG emissions in order of 80% by 2030 and zero net emissions by 2040. However, while we still see a need for interim targets, and an agreed end date to achieve zero net emissions we see it is vital that our 'targets' and 'strategy' are community owned and delivered by the community in partnership with the ACT Government. We have to put the politics of 'climate targets' piousness out of the picture and focus on the challenge of getting on with delivery.

We need a structure to enable a community-Government partnership to implement the new strategy, to monitor and evaluate outcomes / progress and work on future iterations of the policy in order to deliver the vision of reducing our emissions as soon as possible if we can do this taking into account: equity, economic viability, societal and ecosystem impacts then we will truly be a leading jurisdiction on local climate change action.

In order for this to succeed there is a need for a clear understanding of the various measures we have available, their costs, political acceptability, and social, economic and ecosystem impacts. The ACT Government is currently finalising a consultancy that will hopefully provide the information, or at least a framework to enable a fruitful conversation on the actions / measures and their merits or otherwise in achieving our vision.

Recommendation 7.

The ACT should set interim targets – 2025, 2030, 2035, 2040 – with a goal of being zero net emissions as soon as possible, taking into account equity, economic viability, societal and ecosystem impacts.

Recommendation 8.

The Climate Council proposed interim targets be reviewed in light of the forthcoming cost-benefit analysis of policy measures / actions.

3. Sectoral Targets and Reporting on Progress towards Zero Net Emissions

Weathering the Change – [Action Plan#2](#) was adopted in September 2012. It set out a pathway for reducing ACT greenhouse gas emissions by 40% by 2020 on 1990 levels. While also noting and recognising the longer term timetable of delivery of the [then] target of zero net emissions by 2060.

The Plan outlined 18 actions across five sectors to achieve this reduction in our local greenhouse gas reductions. It also set out the total level of emissions reductions expected from the actions in each sector (see below, AP2 p ix). As can be seen the bulk of the emissions reduction was from the energy sector via the switch to

renewable electricity. It is welcomed and important that for the other sectors specific targets and measures were detailed.

Executive summary table 1: targeted emission reductions by sector

Sector	Actions	Emissions reduction in 2020 (tonnes CO ₂ -e)
Residential sector energy use	6	218,000
Non-residential sector energy use	3	181,000
Transport sector emissions	1	138,000
Waste sector emissions	1	16,000
Energy supply sector emissions	3	1,471,000
Climate Change adaptation	3	N/A
Monitoring and reporting	1	N/A
Total	18	2,024,000

Recommendation 9.

We support ongoing sectoral targets as established in Action Plan#2. However fundamental to these sectoral targets is the capacity to measure and report on delivery of these sectoral targets against the policies or actions put in place to deliver GHG reductions.

What is disappointing is that neither the ACT Government nor the independent reviews of these actions have been able to assess performance of the measures / actions against projected GHG emissions reductions, nor is the cost of the policies or actions used to deliver certain abatements clearly articulated.

For instance, the ACT Government had to commission an extra report "Projections of ACT Greenhouse Gas Emissions to 2020 report" in order to assess "how actions contained in AP2 were tracking towards achieving the Territory's first emissions reduction target of 40% reductions on 1990 levels by 2020". (2015 Review – page 42).

Similarly, the first Independent Status Report on Action Plan #2 by the Commissioner of Sustainability and the Environment (2014) states: "Answering the question of how the ACT is tracking against sector GHG emissions targets posed a number of challenges. (Page xiii) It is important to recognise as the report states that "all governments – local, national and international – are currently negotiating and designing ways of overcoming or dealing with these issues." (page 10)

However the second Independent Status Report on Action Plan #2 by the Commissioner of Sustainability and the Environment (2017) is silent on this matter and simply reports on delivery of the actions – i.e. in progress, completed etc. and does not comment on whether the actions achieved GHG reductions and /or the quantity.

Recommendation 10.

A clear reporting template be developed and consistently used to assess delivery of sectoral targets against policies and actions including financial, social and ecosystem costs of abatement.

Recommendation 11.

Independent reporting by the Commissioner for Sustainability and the Environment should be continued but against more consistent terms of reference to assess actual delivery of GHG emissions by sector and by measures by cost of abatement.

There is a need for consistent reporting on measures / actions and policies across jurisdictions to make it easier for learning of what works well and delivers good GHG abatement quickly in a cost effective manner.

The international [GHG Protocol Policy and Action Standard](#) provides a standardised approach for estimating the greenhouse gas effect of policies and actions. At a broad level Action Plan#2 meets the criteria in the protocol but does not for assessment of particular measures. However as a leader it is important to know what works and what doesn't.

The report states:

"However, changes in GHG inventories over time do not explain why emissions have grown or declined over time or reveal the effects of individual policies or actions. Emissions may change as a result of a variety of factors, such as a combination of many different policies that increase and decrease emissions, as well as a range of non-policy factors (for example, changes in economic activity, energy prices, or weather). By attributing changes in emissions to specific policies and actions, this standard can inform policy selection and design and enable an understanding of policy effectiveness. Policy/action accounting should be carried out as a complement to developing and updating a GHG inventory on a regular basis." (Page 8-9)

It is vital that measures / actions to reduce GHG emissions are transparent, quantifiable and comparable across jurisdictions.

Review of Strategies / Action Plans

Action Plan#2 requires 5 yearly reviews. We welcome this and acknowledge the first 5-year review is now publicly available, however we note there was no call for public input or any [as far as we aware] consultation with key stakeholders on the review. At this stage we cannot see much difference between or greater accountability / transparency from these various reporting mechanisms.

Recommendation 12.

Reviews of future Climate Change "Strategies" should be open to public consultation as well as with key stakeholders.

4. Divestment

The ACT Government is to be congratulated for its work on ensuring its investments are taken out of fossil fuel projects. In August 2015 the Chief Minister Andrew Barr announced that the ACT would “divest the ACT investment portfolio of high-carbon emitting companies and sectors”.

Local divestment has to be a key part of ACT leadership on local action on climate change. While the ACT is leading Australia on local climate action having our money invested in fossil fuel projects in other places undermines this local action. We support complete divestment by the end of 2018.

As a result of the ACT Government policy there has been an 84.5% reduction in fossil fuel reserves in ACT Government investments to date. The total carbon emissions represented by the companies in which the ACT owns shares as at September 2017 stands at 14.7 gigatons (Gt). This compares with 94 Gt prior to the Chief Minister's divestment announcement of August 2015. For more info and updates go to [350.org Canberra](http://350.org/Canberra).

Notwithstanding this welcome reduction, the ACT Government continues to invest in 32 companies on the Carbon Underground 200 list. Three of those (Rio Tinto, South32 and Wesfarmers) have significant coal reserves as part of their diversified portfolios, and many of the remaining 29 companies have exploration and distribution of oil and gas resources as their primary business.

The Chief Minister, Andrew Barr has undertaken “develop options for a completely fossil fuel free investment policy”. (Open letter to the residents of Kurrajong of 14 October 2016). However we are yet to see a timetable for completion of this.

Recommendation 13.
The ACT Government finalise complete divestment of its investments in fossil fuel related corporations and projects by the end of 2018, or outline an alternative timetable for this to occur.

5. Carbon Offsets

GHG emission reductions must focus on mitigation in first instance with carbon offsetting as a last resort. Any offsetting must be verifiable and able to be demonstrated to have actually delivered emission reductions. Carbon offsetting can simply be a way of shifting things around from one jurisdiction to another. If we are serious about a global objective of zero net emissions there are clear limits to offsetting.

Recommendation 14.
Carbon offsetting to reduce emissions should only be used as a last resort particularly noting the limitations of carbon offsetting within the ACT region.

Recommendation 15.

There is a need for a carbon offset policy to guide decision-making. A key principle underlying any such policy should be recognition that offsetting simply displaces emissions between jurisdictions.

We support the concept of introducing and applying a social cost of carbon, however there is a need for a transparent process on the value of the 'cost' and any allocations need to be for actions / measures or policies that will deliver quantifiable GHG emission reductions. As we know can spend a lot of \$\$ on things under the name of delivering GHG abatement which actually don't achieve much. We need a link back to the cost of abatement for measures / actions and policies and their effectiveness in achieving GHG emission reductions.

Recommendation 16.

We support the concept of allocating funding based on the social cost of carbon as a means to support the transition to zero net emissions.

6. Legislative changes

The proposed 'new' date to achieve zero net emissions and interim targets should be incorporated into the *Climate Change and Greenhouse Gas Reduction Act 2010*.

These targets should be affirmed via some process within the ACT Legislative Assembly to ensure there is tri-partisan support.

Recommendation 17.

The new zero net emissions target and interim targets be legislated via the Climate Change and Greenhouse Gas Reduction Act 2010.