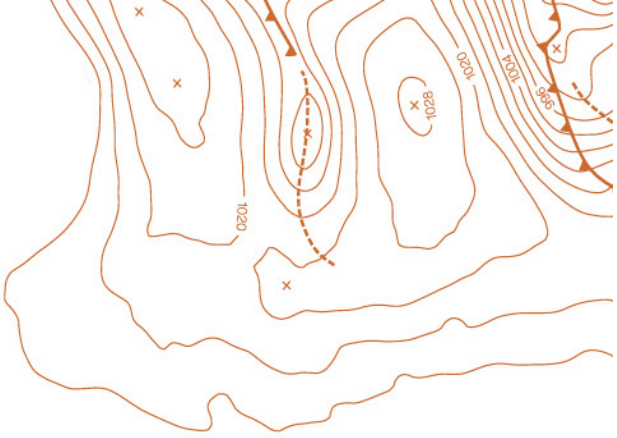
Western Alliance for Greenhouse Action



Emissions Reduction Pledge for Councils Under the *Climate Change Act 2017*

The *Climate Change Act 2017* (hereby referred to as the Act) is a relatively new piece of Victorian legislation that includes a emissions reduction pledge process. The pledge process includes an opportunity for Councils to make a pledge and submit it to the Minister. This guide and research report is specifically focussed on Councils involvement with these emissions reduction pledges.

Section 46 & 47 of the Act stipulates that Councils may choose to make a voluntary emissions reduction pledge. This assists Victoria in its "transition to a climate resilient community and economy with net zero emissions by 2050" (DELWP 2019). This project has been undertaken to assist the Western Alliance for Greenhouse Action (WAGA) to understand Councils' understanding of the opportunity, reasons and potential benefits of making a pledge. Furthermore, it seeks to help Councils to understand the benefits of making an emissions reduction pledge under the Act and to offer recommendations on how this process could be improved.

The research that has been conducted has been undertaken by three RMIT students studying a Bachelors of Environments and Society. With assistance from WAGA's Coordinator/Executive Officer, Fran Macdonald, a guide to produce an emissions reduction pledge under the Act has been supplied. Additionally, an appendix has been attached that includes the research that was undertaken by the students including a literature review of contextual research and the methods used to ascertain their findings. The attached appendix also contains the results of the survey.

Overview:

The Victorian *Climate Change Act 2017* provides a framework for Councils to make a voluntary pledge and implement a five-year emission reduction plan. Already, Councils in Victoria are taking part to submit pledges for practical projects to combat climate change. Such pledges can vary from small to large impact these include energy efficiency, renewable energy, energy efficiency and sustainable transport all this is to reflect the 2015 Paris Agreement. However, only two Victorian Councils have either completed, or are in the process of completing, an emissions reduction pledge under the Act. These being the City of Melbourne and Brimbank City Council.

Sections 46 and 47 of the *Climate Change Act 2017* contain information regarding Councils involvement in the Act and sets out the guidelines of a Council's emissions reduction pledge. Section 46 discusses the preparation of Council pledges. A Council can make a statement in respect to greenhouse gas emission reductions resulting from the Council's powers in accordance with the *Local Government Act 1989* on or before August 1st, 2020. These pledges must apply to a five year period commencing the first of January of the following year.

Section 47 of the Act includes the content of a Council pledge.
The pledges must include:

a) A description of actions undertaken by the respective Council over the following five years that are reasonably expected to contribute to the reduction of greenhouse gas emissions caused or influenced by the Council, and
b) A reasonable estimation on how the reduction of greenhouse gas emissions will result from the implementation of those actions

During the preparation stages Councils must take into consideration policy objectives and guiding principles. These are specified in sections 22 through to 28.

Why Councils?

All across Australia, cities and towns are becoming more at risk from climate change impacts. We have already seen this through worsening bushfires, heatwaves and floods. These same places are also crucial in coming up with innovative, community-based climate change solutions. Victorian Councils have been leading the way in terms of climate action for years already, with many already having set targets of 100% renewable energy and zero emissions. There has already been millions of dollars worth of investments into renewable energy rolled out across the country by local Councils and community groups. One example

of this that was highlighted in the Ironbark 2018 'Australian Local Government Climate Review' is described below.

Case Study: Newstead - 100% Renewable Energy for the People

- Since 2008, Renewable Newstead has been working to supply the community of Newstead located in central Victoria with 100% renewable energy.
- Community members and Council have been working together to run their town only with locally generated, reliable, grid-connected energy that is also affordable.
- In 2018, Newstead announced a deal that was negotiated with their local electricity distributor, that could pave the way for similar renewable energy projects across the country.
- By including community ownership and balancing social equity, this project has generated extra benefits for their community and demonstrates the power that communities and local governments have.

If you look more broadly, Australia is lacking the federal action required to develop and implement policies to rapidly reduce emissions and decarbonise the economy. In Ironbark's (2018) report, a study found that 88% of Councils were somewhat, or very, unsatisfied with the Federal Government's approach to meeting global climate change targets. Current policy and initiatives have proven not to be enough to meet our targets under the Paris Agreement and effectively reduce emissions to safe levels.

Despite inaction at a federal level, Victoria is one of the first State Governments to have legislated emission reduction targets globally. However, there are sparse state policies that provide local government with the support that is needed to meet these targets and reduce emissions. Regardless of this, Councils have been actively involved in climate change mitigation for over 20 years and this leadership has been and still is an important factor that can push state and federal ambitions.

Local government action to reduce emissions creates mutual benefits for the Council itself as well as the broader community. Lowering emissions contributes significantly to meeting our Paris Climate Agreement targets, safeguarding the environment and increasing community awareness on what your Council is doing to take action on climate change. Councils across Australia, working with their communities, have a unique opportunity to path the way in terms of emission reduction plans and a just transition to renewables, all to ensure more resilient, safer and greener communities. Councils have the ability to influence how towns, homes and businesses are built, how thousands of people travel everyday and how new sustainability programs are implemented. Equally, Councils can work collectively to lobby for state and federal action.

Benefits of Making a Pledge:

Emission reduction pledges made by Councils under the *Climate Change Act 2017* give an opportunity for a plethora of positive benefits for Councils. The extrapolated data from our Victorian-wide survey indicates that many Councils found these benefits to help promote emission reduction pledges to the community, be an effective driver to reduce greenhouse gas emissions and demonstrate the Council's disposition to mitigate climate change which can be seen in Figure 1 below. While there were only 17 Council responses, this represented an even distribution of urban and rural/regional Councils.

Rank the following potential benefits (1 being the greatest benefit) of an emissions reduction pledge for your Council.
1. It could help promote the Council's emissions reduction target, strategy and/or actions to the community and other levels of government.
2. It could be an effective driver to reduce emissions through projects established to fulfil it.
3. It would demonstrate the Council is taking action to mitigate climate change for the community.
4. It may encourage community participation in projects aimed at reducing emissions.
5. Other benefit(s)
6. No benefits

Figure 1. List of Most to Least Popular Responses to Survey Question 6

While there have been other emission reduction pledge processes before, such as *Take2* and *The Global Covenant of Mayors for Climate and Energy*, this new pledge process promises to be different. Like the aforementioned initiatives, surrounding literature shows that they have been convoluted, lengthy and difficult to uphold. Many of the respondents of our Victorian-wide survey had similar attitudes to such initiatives. Most strikingly though, no Councils found these pledge initiatives to have no benefit. However, the new pledge process stipulated in the *Climate Change Act 2017* is the first pledge process to be included in State government legislation. This ground-breaking feature of the legislation offers Councils to be a part of something that could become the precedence of transformative policymaking. This is because the only ability to repeal this initiative is by further legislation, cementing its place in current policy-making. Contextual literature has identified that collective action and social capital are important pillars for adaptive (and mitigative) capacity. Herein lies the opportunity for your Council to be a part of that by utilising this new legislative pledge initiative.

Step by Step Guide on How to Make a Council Pledge Under the *Climate Change Act 2017*

1. Preparation

- Prepare an emissions profile and science-based targets for emission reduction (see example)
- Prepare an Implementation Plan (see Table 1)
- Council pledges must be made on or before 1 August 2020 and must relate to the period of 5 years, beginning 1 January the year following its preparation, in accordance with section 46(3) of the Act.

2. Content

Council pledges must include;

- An implementation plan: A description of actions that will be undertaken by Council during the 5 year period that are expected to contribute to the reduction of greenhouse gas emissions
- An estimate of the total amount of greenhouse gas emissions reductions expected to result from the implementation of these actions

3. Notification

- Once prepared, write a letter to the Minister including a copy of the pledge and any other supporting documents (for example a Climate Emergency Plan or Climate Change Mitigation Plan)

Example:

Science-based targets:

Science-based targets to reduce greenhouse gas emissions provides a framework setting targets and evenly distributing actions that need to be undertaken. By determining a science-based carbon budget for a Council's corporate and community emissions, there is a clear understanding of the scale of action that is required and helps identify clear responsibilities for the actions.

Targets are considered 'science-based' if they are in line with the latest climate science in terms of meeting goals outlined in the Paris Agreement - to reduce global warming to below 2°C above pre-industrial levels and pursue limiting warming to 1.5°C.

Targets can be calculated by:

- Using the allocation of global emissions to the various sectors within the Australian economy to calculate the proportion of emissions that Council operations need to reduce.
- Targets are then developed to compare with efforts to reduce emissions over the 5 year period. For further information and tools to develop these targets and allocate emissions please visit: https://sciencebasedtargets.org/sbti-tool/.

Implementation Plan:

Table 1. Example of an implementation plan derived from City of Melbourne

	Action	Description	Emissions reduced: Direct influence (tonnes CO_2)	Emissions reduced: Indirect influence (tonnes CO_2)	Timeframe
Priority 1: 100% Renewable energy	Advocate for a more ambitious renewable energy target	• Advocate for a more ambitious renewable energy target from State Government • Advocate to regulators and network distributors to make the electricity network 'renewable ready'	N/A	N/A	Year 1-5

	Accelerate corporate Power Purchase Agreements	• Support corporate Power Purchase Agreements • Advocate for the Victorian Government to purchase 100% renewable energy for its operations	X amount	Y amount	Year 1-5
	Facilitate residential purchasing of renewable energy	• Increase awareness of rooftop solar and other green power opportunities • Work more closely with social and community housing, strata housing and businesses	X amount	Y amount	Year 1-5
Priority 2: Zero emissions buildings	Work with industry and government agencies to reduce barriers and deliver zero emissions buildings	• Advocate and work towards all buildings being carbon neutral by 2050 • Engaging and influencing property sector stakeholders and private residential building owners to improve building performance	X amount	Y amount	Year 1-5
	Advocate and facilitate transition from gas to electricity	• Advocate for specific requirements in the National Construction Code (NCC) • Work with developers and building owners to promote this transition • Develop a long-term strategy for transitioning existing buildings	X amount	Y amount	Year 1-5
Priority 3: Zero emissions transport	Increase space for walking, cycling and green infrastructure	• Reallocation of road space for more cycling paths, footpaths, public transport priority lanes, urban greening and public space	X amount	Y amount	Year 1-5

	Advocate for public transport to be powered by renewable energy	• Advocate for electrification of the bus fleet as part of ongoing fleet renewal • Advocate for electrification of regional rail lines	X amount	Y amount	Year 1-2
Priority 4: Reducing the impact of waste	Promote and facilitate waste education programs, recycling and diversion of waste from landfill	• Develop and implement an organic waste segregation and collection plan that covers residential and commercial and industrial properties • Reduce waste from Council operations and events	X amount	Y amount	Year 1-5
		Total emission reductions (tonnes CO_2)	**	**	
Further questions and/ or requests	• Option for Councils to join after the 1 August • Creation of a repository for all pledges to be able to be accessed by the public				

Recommendations for the Victorian Government:

Currently, only two out of the seventy-nine Victorian Councils have undertaken the pledge process outlined in this legislation. The research that has been conducted has identified areas in which this pledge process could be improved and have been described below.

1. Open up a dialogue between DELWP and Victorian Councils.
   A clear, transparent communicative platform could be developed to better engage Councils and explore options to assist Councils in making a pledge.

2. Allow for flexibility of Council emission calculations.
   The *Climate Change Act 2017* stipulates that Councils must estimate the "total level of greenhouse gas emissions reductions expected". As Councils have limited ability to control such things as industry in their municipality, a relaxation of this step should be taken. Instead, the Victorian government and DELWP could work with Councils to assist in making correct science-based targets for Councils. (See example on p. 6)

3. Allow Councils to make emission reduction pledges between the current 5-year periods.
   Currently, the *Climate Change Act 2017* states that an emission reductions pledge may be made in every **fifth year** following August 1st, 2020. This excludes Councils that make an emission reduction pledge in the years between 2020 and 2025 and should be amended. This may be through a re-wording or amending part of the legislation which DELWP could undertake with the assistance and cooperation of other Councils to better address their needs.

4. Allow for flexible emission reduction pledges such as multi-Council, multi-project or greenhouse alliance pledges.
   Similarly, the Act does not allow for a collective emission reduction pledge to be made. These could include multi-Council, multi-project and/or Greenhouse Alliance pledges. Councils already have projects where they account for emissions and so a flexible emission reduction pledge could avoid duplication and an unnecessary burden of extra work.

5. Inaugurate a state repository for emission reduction pledges made under the *Climate Change Act 2017*.
   At this point in time, there is no central repository for Councils (or any agency) to promote their emission reduction pledges to the public or other sectors.

For further discussion on these recommendations and the research that was conducted to

ascertain these findings, see the attached appendix.

Find out more:

For further information, contact WAGA:

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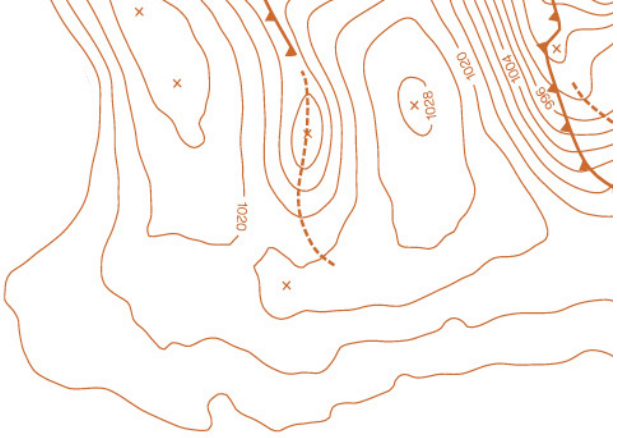
Western Alliance for Greenhouse Action



Appendix 1

Emission Reduction Pledges for Victorian Councils

Conducted by Andrew Tancredi, Joshua Munari & Montanna Gerber-Corn,

on behalf of the Western Alliance for Greenhouse Action (WAGA)

This report must be considered to be a ***DRAFT*** as it has not yet incorporated comments by the project supervisor nor client

Executive Summary

The Victorian *Climate Change Act 2017* mandates state government departments and agencies make greenhouse gas emissions reduction pledges to assist Victoria in its transition to a climate resilient community and economy with the goal of net zero emissions by 2050. Councils are invited, but not mandated, to make a pledge as well, and this report is specifically focussed on Councils' involvement in the pledge process. This report aims to discuss whether individual, voluntary initiatives such as a pledge system, are the most effective means at achieving collective environmental outcomes. This project have also been undertaken to assist the Western Alliance for Greenhouse Action (WAGA) to understand Councils' perceptions of the opportunities, reasons and potential benefits of making an emissions reduction pledge and to show Councils whether they should, and how they can make a pledge of their own. Research consisted of survey questionnaires and follow-up informal interviews with two Councils who have already, or are in the process of making a pledge under the Act. Our findings show that there are better alternatives to a voluntary pledge approach in terms of meeting emission reduction targets. We found that a more cooperative pledge system, that was somewhat mandatory, would provide an opportunity for more meaningful collection action, public engagement and better financial assistance and support for Councils. Due to the lack of understanding and promotion of previous pledge-based initiatives, we saw that Councils felt programs such as these do not provide the best opportunities to implement effective actions to meet targets. Based on the key findings, we make a series of recommendations, directed at the Department of Environment, Land, Water and Planning (DELWP): the inauguration of a state repository for completed pledges; the creation of mandatory targets; on opportunity for collective pledges to be made; and a more open and transparent dialogue between DELWP, Victorian Councils and community members. Furthermore, opportunities for further research include looking into the efficacy of Councils reducing emissions and if the current systems and programs in place allow for Councils to be important actors in those reductions.

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Policy Background

The *Climate Change Act 2017* is the new legislation heading Victoria's adaptation and mitigation strategy against climate change. It was successfully passed through Parliament in February of 2017. This bill seeks to be a key contributor to Victoria's target of net zero emissions by 2050, becoming the second most ambitious piece of legislation by a state or territory to reach that target (Sutton *et al.* 2020). Section 46 and 47 of this legislation stipulates that Councils may make a voluntary emissions reduction pledge. The pledges must be finalised by any given Council on or before August 1st 2020 and refers to a five-year period starting January 1st the following year (2021-25). Councils may reaffirm and alter these pledges in every fifth year after August 1st 2020 (e.g. 2025, 2030, 2035 etc). The pledges must include actions that will be undertaken by the Council over the 5 years that are "reasonably expected" to contribute to the reduction of greenhouse gases caused *or* influenced by the Council. Currently, there is no option to make a more collective pledge that would incorporate more than one Council. This presents an opportunity to discuss the literature surrounding voluntary initiatives, successes or downfalls of such pledge-based initiatives, benefits of collective rather than individual action and the link between public acknowledgement/engagement and efficacy of these initiatives.

Research Opportunity

Voluntary Pledge Initiatives

The legislation allows Councils to make a voluntary emissions reduction pledge. This form of emissions reduction is unlike the more commonly used mandatory command and control regulations or economic incentives such as taxes (Khanna 2001). As discussed by Patton (2001) the use of voluntary initiatives can be powerful tools in organising management to focus on opportunities to simultaneously improve energy efficiency, environmental performance and economic efficiency. As discussed by Arimura, Hibiki and Katayama (2008), voluntary approaches are recognised as being more effective, flexible and less costly than traditional approaches. Furthermore, Nikolaou *et al.* (2012) emphasise the benefits in adopting voluntary initiatives, in their study on Environmental Monitoring System (EMS),

while also pointing out that transforming from voluntary to mandatory programs would be likely to change the benefits and incentives for firms. While it can prove beneficial to have voluntary initiatives such as the one offered to Victorian Councils, the question of whether it is an effective means to reduce emissions must be considered.

The literature surrounding the *value* of pledge systems like the one outlined in the *Climate Change Act 2017* is varied. While there are benefits for such pledge initiatives, they are not without their faults. Diercks, Larsen and Steward (2019) offer that these initiatives, such as the Global Covenant of Mayors for Climate and Energy, are convoluted and lengthy. This is again highlighted with the International Council for Local Environmental Initiatives, where it "[fell] short in promoting a more ambitious strategy of global change" (Diercks, Larsen & Steward 2019, p. 899). Diercks, Larsen and Steward (2019) do conclude that these initiatives can offer transformative innovation policy within a global context.

Collective Action & Public Engagement

At present, the *Climate Change Act 2017* refers to individual Councils making emission reduction pledges. There is convincing literature surrounding whether collective action, which includes public engagement, is more effective than individual action. Adger (2003) discusses how collective action and social capital are integral pillars for adaptive capacity. Albeit, this requires trust, reciprocity and reputation in both the private and public realms. Furthermore, it is also stated in Walker and Willer's (2003) literature that "coalitions countervail power, and coalitions in the smallest networks reverse power" (Walker & Willer 2003, p. 1217). This can be likened to the coalitions that Councils may present. There are however obvious liabilities that occur with collective action, most strikingly the complexity that arises through short term gains by one individual by sacrificing longer term benefits for all (Ostrom 2010). Again, this could be recognised through Council's individual political, social or environmental agendas. Additionally, there is concern for the public's faith around collective action surrounding energy (or sustainability) issues. A study conducted at Plymouth University found that although there was a lack of faith around collective action surrounding energy, this may be due to a broader lack of faith in politicians or business (Cotton *et al*.

2016). An assumption could be made to combat that lack of faith with Councils offering a wider inclusion of the public.

As previously mentioned by Adger (2003), social capital is integral to adaptive climate capacity. Research conducted by Nepal and Spiteri (2011) found that as public acknowledgement of benefits increases, so too does the perception of the linkage between resources and livelihoods. This highlights how public acknowledgement can also assist in bettering relationships with those delivering services through environmental practices, such as emission reduction projects. Similarly, there is discussion surrounding how wider participation from the community can lead to more equitable results while simultaneously empowering groups and citizens (Paloniemi *et al*. 2015). Interestingly, Villalonga-Olives and Kawachi (2017) interrogate how social capital can be a double edged sword. They use the example of network connections and information of resource sharing being used for both good and evil. While this is a legitimate critique, this paper aligns more with Adger's (2003) assertion of the importance of "collective action in adapting to future changes in climate" (Adger 2003, p. 387).

This presented us with an opportunity to conduct exploratory research into whether the Victorian government's *Climate Change Act 2017* has taken the most pertinent approach for Councils to reduce emissions.

Methodology

A 12-question survey was the main method to ascertain the data. It was designed to take around ten minutes to complete and had a mixture of short answer and extended response questions. While there were no questions that were required to be completed, the assumption was that all participants would complete each question. This was done by the majority of the participants but not all. Questions that were not completed by all participants have been indicated accordingly. The choice to use a survey was supported by Bryson et al (2012) as it is described by the United Nations as an investigation of characteristics for a given population then categorizing the characteristics through the orderly use of statistical methodology.

The survey formulation process took place in the fortnight overlapping April and May. There were three drafts completed and revised upon before the final copy was sent out through the councils' respective greenhouse alliance. A two-week deadline was mandated and was completed by the 20th of May. The survey was completed by 20 participants. This encapsulated 17 Councils from a variety of rural/regional and urban municipalities. This was seen to be sufficient data to proceed to the next phase of the project. While the description that Bryson et al (2012) give in regard to surveys, the information extrapolated from the completed survey gave an opportunity to conduct analytical research. Analytical research was the most applicable approach as the research question contains two aspects that are being measured and the most valid action for mandatory versus non mandatory targets. Initially, the belief was that to obtain a constructive method the focus was solely to be focused on qualitative data. Therefore, it was apparent that due to the scope of our research that only focusing on quantitative data would not suffice as adequate outcomes to reflect the research that had been presented. Consequently, we adapted the aspect of the pragmatic approach as our research contains components of a mixed method approach (Cresswell 2014).

A short interview was conducted with members from the City of Melbourne and Brimbank City Council. These Councils were chosen due to them having already completed, and in the

process of completing, emission reduction pledges under the Act. The discussions with the members of these two Councils was directed in how to better the process of making an initial emissions reduction pledge under the Act. Great detail was given and has been used to formulate an template for Councils to make an emissions reduction pledge.

Ethics

Our study involved surveying and interviewing WAGA Council members and as the National Statement on Ethical Conduct in Research involving Humans states, "all human interaction, including the interaction involved in human research, has ethical dimensions" (NHMRC 2018, para 2). One of the foremost concerns when working with people is ensuring that the research does not result in any kind of harm for participants as well as actively trying to do good (Hammersley & Traianou 2012). In our research we met these research ethics objectives by ensuring that the research design addressed the ethical issues addressed below.

Voluntary Participation

The first ethical issue that was addressed in the research was voluntary participation and understanding that participation in this research could disrupt the participants' regular activities as it requires time and energy to respond (NHMRC 2018). The surveys and interviews also elicited information about who the participant is and what their values and opinions are on this topic. Informed consent then had to be achieved by ensuring participants knew the survey or interview was voluntary and they were aware of exactly how and where their answers were going to be used (Earl, RB 2015). This was done via written communication in a preamble to the survey being sent out that stated that all participation is completely voluntary and a description of what the study involves.

Confidentiality

Another issue that needed to be taken into consideration was confidentiality and the protection of the participants' interests and identity (Earl, RB 2015). Our research guaranteed confidentiality as we (as researchers) can identify a given participant's responses, however do not to disclose any personal information publicly, unless prior consent was given. In the survey, participants' also had the option to add their personal contact details and if they were okay with being contacted for a follow up interview or now. In the second phase of data collection we did contact two participants that were okay with this, Kate and Ben who offered more detailed answers about their opinions on the pledge system overall. When using their answers in this report, permission was first sought.

Limitations

Results

The data extrapolated from the 20 survey respondents included Sustainability coordinators, Environmental Projects officer, Director of Infrastructure and Environment, and Energy Innovation Officer. Each of these respondents have different levels of expertise, knowledge and experience which contributed to the various results. If time constraint was not a leading factor in conducting the survey, a more specific population for the respondents, specifically focusing more on a similar job title, may have resulted in more consistent findings of the data.

Results obtained from web-based surveys, including minimum information, or respondents who chose to skip leading to the estimates being adjusted which must be interpreted with caution (Heiervang, Einar, & Goodman 2011). The web-based, survey monkey had an option for Councils respondents to skip the question, while this may not largely impact results of the data it may arguably the population for the survey alone was 20 out of 81 Councils that participated in the survey then subtracting the Councils who skipped certain questions.
As previously mentioned the Council's pledges must include the action to be undertaken in a 5 year plan this could present as a challenge for some Councils constraints they may face is an election in the Council. In Victoria, a mayor is elected in their Council to lead for a term this may be one or two years, (Vic Councils, 2020) the 5 year pledge plan may not align with that mayor when reflection occurs.
The data results created some relevant quantitative results but some of the qualitative results are difficult to translate into graphs or charts as they contain information of discussion/ suggestion, therefore cannot be categorised into data that is measurable.

Time

The time constraint which we had fortnight to collate data from Councils in Victoria resulted in a small sample size. It is recognized that because of the small sample size the information presented may not be perceived as strong enough to oversee quantitative or statistical analysis for results (Yates, 2003).

Resources

There was the concern that surveying all Victorian Councils would present a challenge. Delivering the same survey to all Victorian Councils potentially highlighted the fallacy that all Councils have the same values, resources and concerns about climate change. Savela (2018) reiterates that treating an entire city, or in this case state, fails to capture the essence of the landscape. While our survey had a split between municipalities in urban and rural/regional areas, this may still be true for our survey and its respondents.

Covid-19

Due to the Covid-19 outbreak in early March, it contributed to the delay in some deadlines for the research group's timeline. Targets from our WAGA group were pushed back, this included cancelled meetings and review of survey drafts being postponed as well as contacting Council groups through email rather than face-to-face interviews or phone conversations.

Findings

Survey

The results extrapolated from the Victorian-wide Council survey were responded to by twenty individuals. This encompasses seventeen Councils from a range of urban and rural/regional Councils. Below is a breakdown of the participants, what region their Council resides in, and the individual respondents role in that Council. It should be noted that one respondent did not provide those details, however their responses have been included. As can be seen in figure 1, there was an even distribution of Councils that participated in the survey. Similarly, in figure 2, there was a strong response from participants who are sustainability/environment coordinators and officers. This was to be expected as each Council's greenhouse alliance forwarded the survey onto their respective Councils.
It should be noted that not all participants answered every question. Similarly, some questions allowed multiple responses. Where this is the case, the number of respondents has been provided.

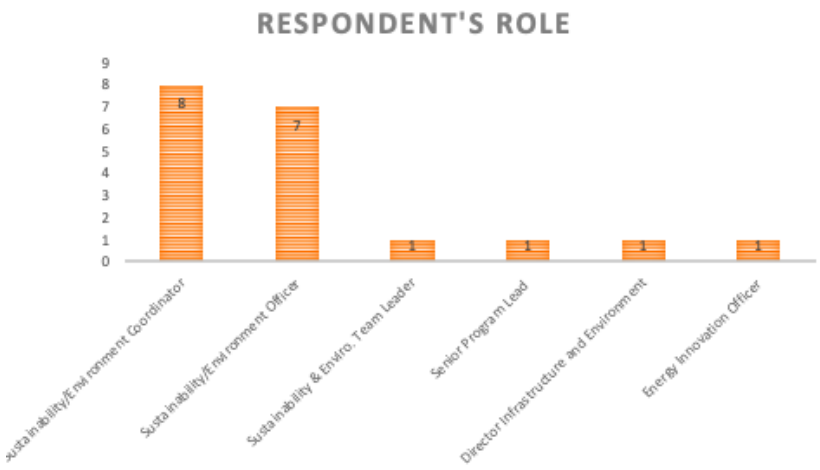

Figure 1: Respondent's Role

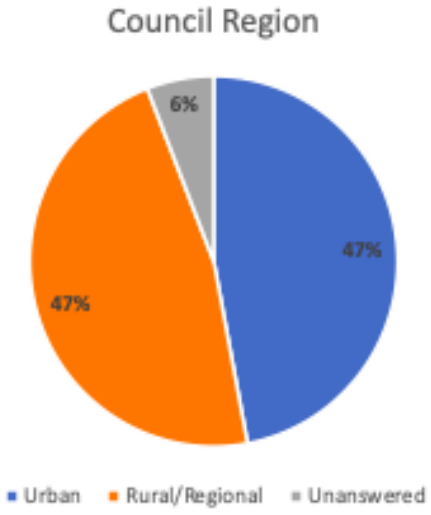

Figure 2: Respondents

Participants of the survey were asked ten questions relating to their experiences with past emission reduction pledges and voluntary initiatives and their knowledge and perceptions of the pledge process outlined in the new legislation. Firstly, participants were asked specifically about the *Climate Change Act 2017* pledge process and if they knew about it. Additionally, they were also asked whether they would/have considered making a pledge. These results gave us an understanding of the level of public awareness in regard to the Act and also the level of interest that Councils had towards making a pledge under this legislation.

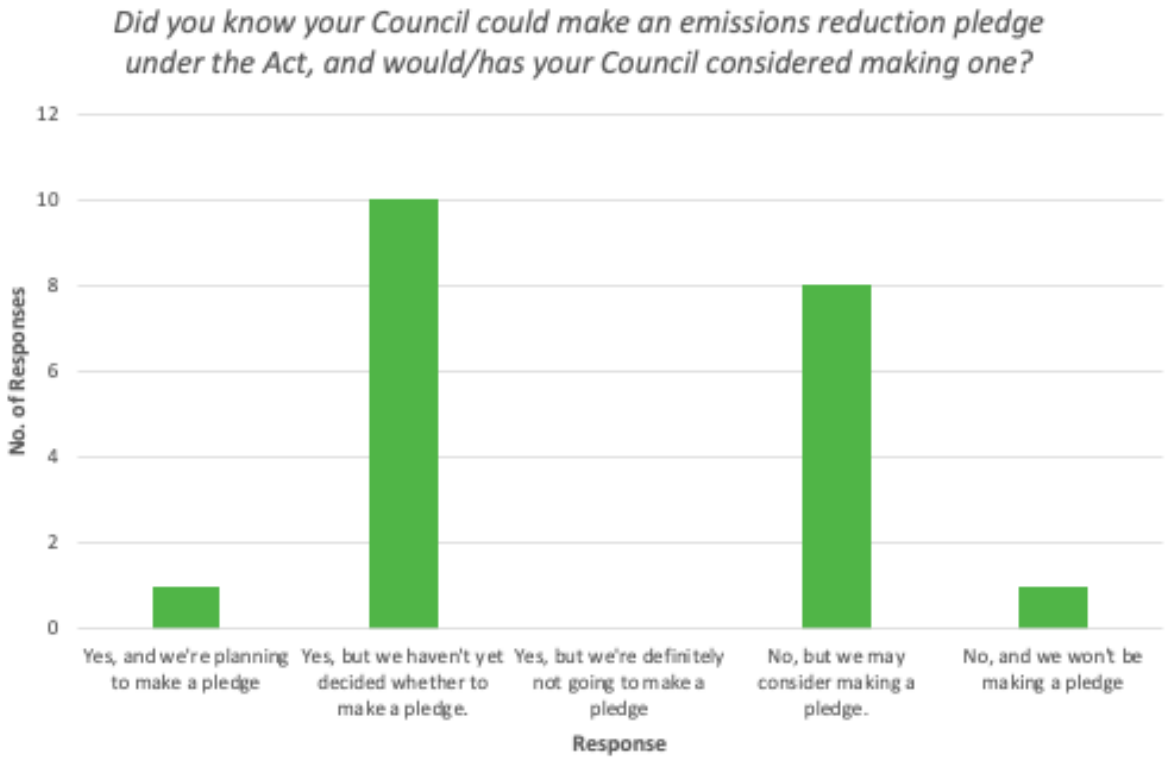

Figure 3: Participant Responses to Question 2

The next question related more broadly to other emission reduction pledges. They were given an opportunity to identify whether they have been a part of an emissions reduction pledge process before. Such initiatives included *Take2* and the *Global Covenant of Mayors for Climate and Energy,* while also being given the option to select 'other'. Figure 4 demonstrates that the majority of participants' Councils had previously made an emissions reduction pledge. Many of the participants who selected 'other' referred to project pledges, such as the Cities Power Partnership. These initiatives were not a focus for this research.

Figure 4: Participant Responses to Question 3

Continuing on from the previous question, the participants were provided with a spectrum in which they could value these past pledge processes. This was relatively open-ended with no sort of criteria given to value them. They were able to rank from 0-100, with 0 being 'no-value', the value that these pledges had provided their Council. Given that there were no criteria for them to base this mark off, an opportunity for them to justify their answer was provided. As can be seen in figure 5, only a small portion of participants found great benefit in these previous pledge processes. Many justifications for the lack of benefits these pledges created for their Council was to do with time, tokenism in making a pledge, and a lack of awareness.

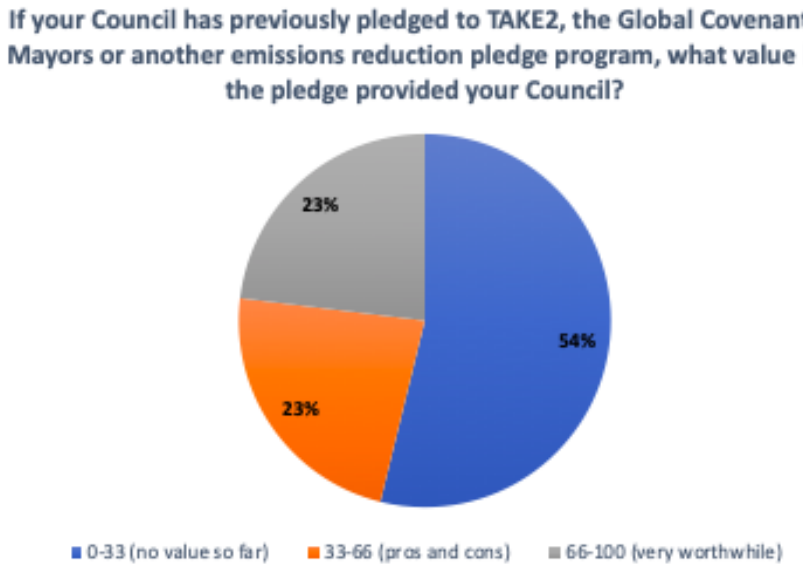

Figure 5: Participant Responses to Question 4

Thinking hypothetically, we asked the participants the *potential* benefits from an emissions reduction pledge for their Council. There were six options that were ranked from one to six, one being the greatest benefit and six being the least. These ranged from effectively reducing emissions, to promoting their Councils' image. There was an opportunity for participants to select 'no benefit', but as figure 6 highlights, no respondent shared that view. It should be noted that figure 6 relates to the *average* result, meaning each response was tallied up and divided by the number of respondents.

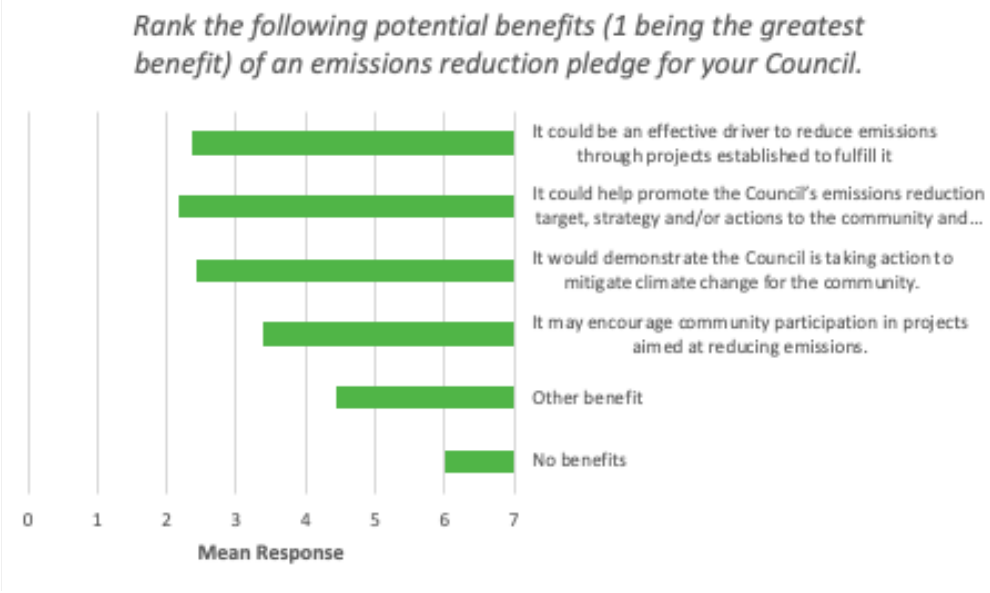

Figure 6: Participant Responses to Question 6

The following three questions related to potential changes in the legislation that would allow collective pledges to be proposed, a public repository to be established and mandatory targets to be set. The first two of the three questions sought to find if knowing other Councils had made an emissions reduction pledge under the Act, would they have been more inclined to make one. Additionally, they were then asked if having a central repository would be helpful. These were asked together because of the reciprocity between the two. Hypothetically, if there was a state repository, then Councils would be able to know whether others had made a pledge and subsequently make one themselves. This thought process was reflected in figures 7 and 8.

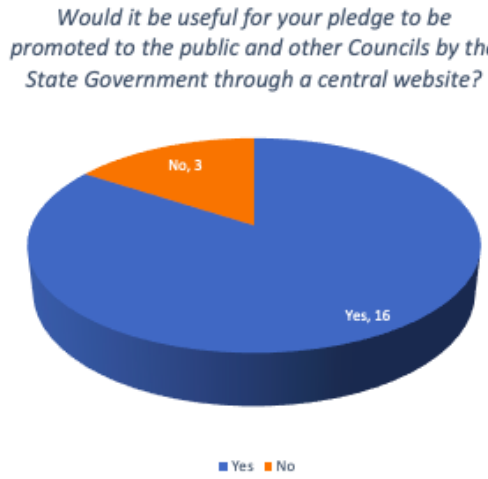

Figure 7: Participant Responses to Question 9

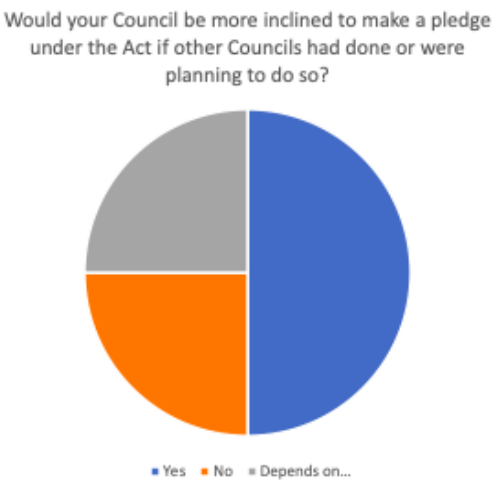

Figure 8: Participant Responses to Question 8

Participants were then asked whether they would be interested in a collective pledge instead of, or as well as, an individual pledge. This was asked as at this point in time the *Climate Change Act 2017* only allows for individual Council pledges. From the participants' responses, there was a large percentage of those who were interested in a more collective pledge. Only two participants preferred the individual pledge. This is highlighted in figure 9 below.

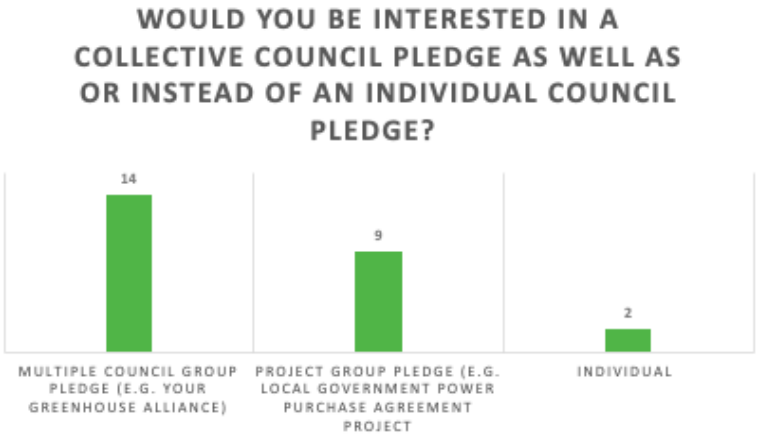

Figure 9: Participant Responses to Question 10

Finally, the last question addressed whether a mandatory initiative would be more effective compared to a voluntary one. The Act refers to Councils making a *voluntary* pledge, with no repercussions if one is not produced or to the level of emissions required to reduce. As only two Victorian Councils have begun to make or completed an emission reduction pledge, the assumption was that a mandatory target would be more successful in driving Councils to reduce emissions. There was an overwhelming majority who shared that assumption which is demonstrated in figure 10 below.

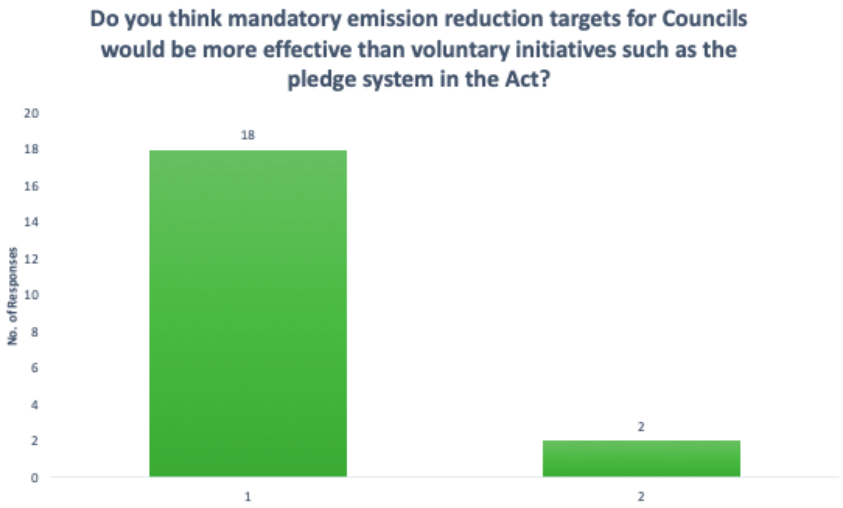

Figure 10: Participant Responses to Question 11

Interviews

Interviews with members of the City of Melbourne and Brimbank were conducted via email. Both of these Councils have either completed an emissions reduction pledge or are in the process of completing one under the Act. The aim of these interviews was to ask what could be improved in the pledge making process. Great detail was given by both Councils and have been used to guide the recommendations and assist Councils in making an emissions reduction pledge. This can be seen on page six of the previously attached document.

Discussion

From the respondent's survey answers and interviews with the City of Melbourne and Brimbank, three key themes were identified and prioritised in the research. These themes revolved around collective action as opposed to individual action (which encompassed public engagement) effectiveness of voluntary initiatives, and the value of pledging initiatives. Each theme addressed is supported by the data derived from both the survey and interviews conducted as well as further research.

Collective Action

As previously mentioned, the Act does not currently include guidelines on how to make any type of pledge other than one from an individual Council. The survey that was produced to all Victorian Councils asked three questions regarding the opportunity for collective action and better public engagement. The data shows that the respondents were interested in a more holistic and cooperative pledge system compared to the current individual process. While it should be noted that two respondents did believe an individual pledge would be more effective, their view was not shared by the rest of the participants. This may demonstrate that the current legislation has not taken into account the option for a collective pledge which seems to be more popular among the participants.

Participants also had an opportunity to justify their responses with discussion veering towards the benefits of stronger relationships, greater support networks, and the added benefit of information sharing. There was some hesitancy regarding the level of collaboration within the current climate of Victorian Councils and the importance of having an internal pledge before collaborating with others. Interestingly, there was a respondent who spoke about de-legitimising the pledge process if too many are around. This is discussed in further detail later. What these responses highlight is that while it is important to have a strong internal pledge, the benefits of working collectively seem to outweigh the potential detriment. This is supported by Walker and Willer's (2003) assertion that coalitions, such as that of Councils, have the ability to countervail power and can even reverse power. A highly potent factor in Council's ability to reduce emissions at a local government level.
As previously mentioned, Adger (2003) and Paloniemi et al. (2015) stress the importance of both public acknowledgement and engagement simultaneously increasing adaptive capacity and empowering groups and citizens. Neither the Department of Environment, Land, Water and Planning (DELWP) nor the Act has created a public repository for the public or Councils to see who has made, or is planning to make, an emissions reduction pledge. Without the opportunity for either of these agencies to acknowledge those who have made pledges, the legislation removes a crucial and integral pillar of its adaptive capacity; social capital. The survey included two questions to gauge Councils' response to this lack of transparency. Figure 7 supports this by highlighting that Councils would find it useful to have a central repository, such as a website, to be able to promote their pledges to the public and other Councils.

Having a central repository would not only be helpful in public acknowledgement of the pledges, but may also assist in pushing other Councils to make a pledge. Again this is supplemented with figure 8 which consolidates that assumption. The majority of respondents felt that if they had known other Councils had already made emission reduction pledges, that they would be more inclined to make one themselves. This could have a domino effect that could potentially accelerate the rate at which Councils make an emissions reduction pledge under the Act.

Mandatory Targets and Initiatives

At present, this pledge system is a completely voluntary initiative. As stated in the Act, Councils' can "produce a pledge to reduce emissions they have caused or otherwise influenced, should they choose to." (Department of Environment, Land, Water and Planning 2017, para 5). Under the Act, there are currently also no consequences if Councils' do not meet their pledges emission reduction targets.

Survey results indicate that mandatory emission reduction targets for Local Government would be more effective than voluntary initiatives such as this one. Results show that 50% of Councils that responded are undecided as to whether they are going to make a pledge or not, and only two Victorian Councils, City of Melbourne and Brimbank, have, or are currently, making a pledge under this Act. As shown in Figure 10, when explicitly asked if they believed that mandatory targets would be a more effective way of reducing emissions across Local Government, 90% of respondents agreed. Some comments relating to this survey question included;

- "I think they (mandatory targets) would, especially if some Council's don't support climate action. It wouldn't dissuade Councils who are already committed to climate action." (Anonymous, 2020)
- "Many councils would not make a pledge unless it were mandatory." (Anonymous, 2020)
- "Voluntary (initiative) is not the way to do this." (Anonymous, 2020)

These comments display how strongly some Council members feel about the need to have solid regulations in place in order for there to be meaningful action across the board. Other Council members highlight that mandatory targets would force Councils to prioritise climate action, if they aren't doing so already. What was also pointed out in the survey results was that Council is largely driven by the selection of Councillors, and some don't feel as though climate action and emission reduction is an issue. Not only do some not think it is an issue but have firm views that conflict with Councils being able to set any emission reduction targets. Another respondent highlighted the fact that if Government were to force the issue,

it would most likely result in much better and more efficient actions. However, Council members that said they don't believe mandatory targets would be more effective said so for reasons highlighted below;

- "We would still struggle to resource funding to undertake reduction projects without further government support." (Anonymous, 2020)
- "They (targets) need to be funded if they are mandatory, as small rural Councils simply do not have the funding to implement a lot of the changes needed to reach targets." (Anonymous, 2020)

Evidently, Councils don't believe they have the support or funding in order to achieve mandatory targets and this could be one of the main reasons only two Councils so far have committed to making a voluntary pledge. Dunn (2010) highlights how it is understandable that there has not been much success of local governments implementing their own sustainability policies and targets, as Councils have many constraints they have to work under. Pini (2009) discusses the most apparent constraint found across Australian Councils is a lack of resources. This has been an ongoing problem for local governments due to their inability to raise revenue easily compared to other levels of government. In recent years this has only been exacerbated due to defending and devolution of powers and responsibilities coupled with an increase in communities expectations of their local Councils (Mercer & Jotkowitz 2000 & Pini 2009).

Paton (2001) argues that voluntary initiatives have been successful in influencing behaviours and challenging the current economic models, to progress environmental and energy efficiency policies. These voluntary actions can also be more cost effective and flexible than other more traditional initiatives. However, as discussed previously, the overall effectiveness of voluntary pledge systems is in question (Arimura, Hibiki & Katayama 2008). Councils have no incentives to go above and beyond to meet the agreed targets, therefore it makes it difficult for voluntary initiatives to have significant influence. Our findings confirm the need for mandatory targets used in conjunction with better support from higher levels of government in order to have the best outcomes for emissions reductions.

Value of Pledges

Looking more holistically at pledge systems in general, questions have been raised about the value they actually provide for local government. As seen in our results, more than half of the participants said that they have found 'no value so far' and only a small proportion have found past pledge systems to be very worthwhile. Some reasonings behind their answers were stated as such;

- "I don't think Take2 was understood by the Victorian Government or by Councils… and certainly not by the community." (Anonymous, 2020)
- "We are not on track to achieve our 2020 target, so that has been disappointing and overall has lacked buy in across the organisation." (Anonymous, 2020)
- "Nothing further has happened with TAKE2 since we signed up." (Anonymous, 2020)
- "Too many pledges may de-legitimise other commitments." (Anonymous, 2020)

The above statements indicate that other pledge initiatives such a TAKE2 have tainted the view on pledge systems overall for come Councils. Many comments were made surrounding the ineffectiveness of the communication surrounding these TAKE2 as majority of the time Councils and community members weren't clear on what was involved. The transition needed to meet targets and the goals under the Paris Agreement requires the State Government to work more closely with all sectors and Local Government to secure job developments, finances and other assistance needed for meeting individual targets and actions (Sustainability Victoria 2019). Before there can be any change, barriers to action need to be removed to allow Councils to feel like they supported in meeting their targets. The value of initiatives such as this is also dampened by the fact that individual Councils, especially rural and small Councils, don't have the financing to take the steps required to reduce their share of emissions (Pini 2009, Sustainability Victoria 2019). Reducing emissions and transitioning to more climate resilient communities requires normalising climate change actions across all levels of government and society. Targets set under the Act will need Government to have climate change embedded into their decision-making and policy objectives. This is difficult to achieve through a program that is completely voluntary, and pledge based as there are no real repercussions if targets aren't met (Arimura, Hibiki &

Katayama 2008, Dunn 2010).

When a pledge system is done well and actions are taken within communities, there is more room for Councils to feel it has benefits and value for them. For example, local government-based approaches that are well communicated and integrated into the community can be particularly valuable because;

- Actions can be tailored to local needs, capabilities and circumstances.
- Projects tend to be trusted and supported by residents, if communicated effectively and are perceived to have the local community's specific interests at heart.
- Smaller scale Council based actions can help facilitate collective, longer-term action at a larger scale.

What has been shown through our results is that Councils do not feel as though participating in past pledge programs has provided any real impact to decision making and action as yet, rather they have just allowed Councils to state that they are doing something and host conversations in that space. However, without any mandatory targets, or legislation to act, there is still work to be done within the program to embed relevant knowledge and processes to facilitate widespread and significant actions.

Recommendations

The recommendations below have been ascertained and built on by the research that has been rigorously outlined. These recommendations address the three key themes that were identified and seek to attenuate them.

1. Inaugurate a state repository for completed emissions reduction pledges made under the *Climate Change Act 2017* to be published.
2. Create mandatory emissions reduction targets to accelerate the number of Councils producing a pledge.
3. Create an opportunity for collective pledges to be put forward.
4. Open up transparent dialogue between DELWP and Victorian Councils to better engage Councils in this process.
5. Further research into the efficacy of Councils reducing emissions and whether the current system allows for Councils to be important actors in those reductions

Conclusion

The *Climate Change Act 2017* is Victoria's new legislation that seeks to assist Councils in making an emissions reduction pledge. The research that has been conducted explores whether the approach that the government has taken is the most pertinent. Using contextual literature addressing collective action, voluntary initiatives, and past pledge processes, a research opportunity was made evident. This was addressed through a survey which was responded to by 20 members of 17 Councils and interviews with Brimbank City Council and the City of Melbourne. Extrapolating the data from these research methods made it clear that there was potential for an alternative approach to be taken for Councils to reduce their emissions. This included allowing for collective pledges to be made, a state repository to be inaugurated and mandatory targets to be introduced. These recommendations were supported by the research and data derived from the survey and interviews.

References

Adger, N 2003, 'Social Capital, Collective Action, and Adaptation to Climate Change', *Economic Geography,* vol. 79, no. 4, pp. 387-404

Arimura, T, Hibiki, A & Katayama, H 2008, 'Is a voluntary approach an effective environmental policy instrument?: A case for environmental management systems', *Journal of Environmental Economics and Management,* vol. 55, no. 3, pp. 281-295

Bryson, G., Turgeon, A., & Choi, P. 2012 "The Science of Opinion: Survey Methods in Research." *Canadian Journal of Anesthesia* 59.8: 736-42.
Corbin, J & Strauss, A 2014, 'Basics of qualitative research: Techniques and procedures for developing grounded theory', Sage publications.

Cotton, D, Miller, W, Winter, J, Bailey, I & Sterling, S 2016, 'Knowledge, agency and collective action as barriers to energy-saving behaviour", *Local Environment,* vol. 21, no 7, pp. 883-897

Diercks, G, Larsen, H & Steward, F 2019, 'Transformative innovation policy: Addressing variety in an emerging policy paradigm', *Research Policy,* vol. 48, no. 4, pp. 880-894

Dunn, M 2010, 'Council Approaches to Implementing Sustainability: a case of rearranging deck chairs on the *Titanic*?' *Australian Geographer,* vol. 41, pp. 351-366.

Earl, RB 2015, *The Practice of Social Research*, Cengage Learning US, <https://ebookcentral.proquest.com/lib/rmit/reader.action?docID=4458812>.

Hammersley, M & Traianou, A 2012, *Ethics in Qualitative Research : Controversies and Contexts*, SAGE Publications Ltd, Los Angeles, <http://search.ebscohost.com.ezproxy.lib.rmit.edu.aulogin.aspxdirect=true&db=nlebk&AN=683980&site=ehost-live>.

Heiervang, E, and Robert G. 2011 "Advantages and Limitations of Web-based Surveys: Evidence from a Child Mental Health Survey." *Social Psychiatry and Psychiatric Epidemiology* 46.1 69-76.

Khanna, M 2001, 'Non-mandatory approaches to environmental protection', *Journal of economic surveys,* vol. 15, no. 3, pp. 291-324

Mercer, A & Jotkowitz, B 2000, 'Local Agenda 21 and barriers to sustainability at the local government level in Victoria, Australia', *Australian Geographer,* vol. 31, pp. 16381.

National Statement on Ethical Conduct in Human Research 2018, *National Statement on Ethical Conduct in Human Research (2007) - Updated 2018,* National Health and Medical Research Council, <https://www.nhmrc.gov.au/about-us/publications/national-statement-ethical-conduct-human-research-2007-updated-2018#toc__15>.

Nepal, S & Spiteri, A 2011, 'Linking Livelihoods and Conservation: An Examination of Local Residents' Perceived Linkages Between Conservation and Livelihood Benefits Around Nepal's Chitwan National Park', *Environmental Management,* vol. 47, no. 5, pp. 727-738

Nikolaou, I, Evangelinos, K, Emmanouil, D & Leal, W 2012, 'Voluntary versus Mandatory EMS Implementation: Management Awareness in EMS-certified Firms', *Asia-Pacific Journal of Management Research and Innovation,* vol. 8, pp. 1-12

Ostrom, E 2010, 'Analyzing collective action', *Agricultural Economics,* vol. 41, pp. 155-166

Paloniemi, R, Apostolopoulou, E, Cent, J, Bormpoudakis, D, Scott, A, Grodzińska-Jurczak, M, Tzanopoulos, J, Koivulehto, M, Pietrzyk-Kaszyńska, A & Pants, J.D 2015, 'Public Participation and Environmental Justice in Biodiversity Governance in Finland, Greece, Poland and the UK, *Environmental Policy and Governance,* vol. 25, pp. 330-342

Paton, B 2001, 'Efficiency gains within firms under voluntary environmental initiatives', *Journal of Cleaner Production,* vol. 9, no. 2, pp. 167-178

Pini, B 2009, 'Australian rural local governments and environmental sustainability: an evaluation of progress', *Australian Journal of Public Administration,* vol. 68, pp. 18293.
Punch, K. F. 2005. 'Introduction to Social Research: Quantitative and Qualitative Approaches', 2nd ed, Sage, London. Swanston: 300.72 P984

Savela, T 2018, 'The advantages and disadvantages of quantitative methods in schoolscape research', *Linguistics and Education,* vol. 44, pp. 31-44

Sustainability Victoria 2019, *Submission to the Environment and Planning Committee*, Sustainability Victoria, <https://www.parliament.vic.gov.au/images/stories/committees/epc-LA/Inquiry_into_Tackling_Climate_Change_in_Victorian_Communities/Submissions/S141A_Sustainability_Victoria.pdf>.

Sutton, B, Mulvenna, V, Voronoff, D & Humphrys, T 2020, 'Acting on climate change and health in Victoria', *The Medical Journal of Australia,* vol. 212, no. 8, pp. 345-346

Viccouncils 2020. Mayor's role. Available at: http://www.viccouncils.asn.au/stand-for-council/how-to-stand-for-council/councils-role/mayors-role

Villalonga-Olives, E & Kawachi, I 2017, 'The dark side of social capital: A systematic review of the negative health effects of social capital', *Social Science & MEdicine,* vol. 194, pp. 105-127

Walker, H & Willer, D 2014, 'Legitimizing Collective Action and Countervailing Power', *Social Forces,* vol. 92, no. 3, pp. 1217-1239

Yates, J 2003, 'Doing social science research', SAGE Publications Limited.

Find out more:

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