FEEDBACK ON DUNEDIN'S 10 YEAR PLAN

Name of group- " Seniors' Climate Action Network

1. Seniors' Climate Action Network is a Dunedin community organization, formed in 2015. As the name suggests the members are senior citizens who are concerned about climate change. The group is committed to increasing awareness in the wider community, of the implications of climate change on our way of life and to facilitating community action to mitigate the effects by reducing carbon emissions and building community resilience.
2. Any long term plan must surely start by having a clear vision of the city we need to be in 10 years' time. The plan the Council has presented us with is a collection of projects which, while they may be desirable, are not directed to a coherent long term vision.
3. Page 1 of the document sets out 3 key things we need to know. The first one is "we want to keep attracting people. . . . . by keeping the city looking good". What it is that attracts people to live, work and study in Dunedin? Is it really that the city looks good? The document makes an assumption without any basis.
4. The second key thing is to aim for business as usual. SCAN believes BAU is no longer an option for life in New Zealand.
5. Only in the 3rd key thing we need to know does the 10 year plan acknowledge we have to "prepare for challenges ahead" from the increasing risks of climate change. However the Council response is "to make sure our roads and stormwater pipes can cope better with these events (floods)." Yes, the Council will have to upgrade the infrastructure in areas vulnerable to climate change effects, but adaptation is an incomplete response without mitigation.
6. It is now accepted that the biggest challenge which the whole planet faces is climate change, and it is SCAN's submission that Dunedin's 10 year plan should clearly focus on climate change, The City Council is to be commended for already adopting the aim of becoming carbon neutral by 2050 in harmony with central government's similar aim. Why then does the 10 year plan not focus on looking at what a carbon neutral city will look like and set out a pathway with the targets we need to reach in 10, 20 and 30 years' time.
7. A carbon neutral city is one which is resilient and sustainable. Carbon emissions in the urban area come mainly from the use of fossil fuels for transport, heating and manufacturing. Emissions in the rural area are mainly from intensive agriculture and steps are already in place nationwide to reduce agricultural emissions.
8. Oil based transport will need to be phased out nationwide, which means the city will need to become a much more self-reliant strong local economy. At present Dunedin relies on transporting food, clothes, household goods and much more from elsewhere in the country or from overseas. 100 years ago Dunedin produced many of these basic goods within the boundaries of the city and surrounding countryside and will need to do so again.
9. In August 2010 the Dunedin City Council commissioned a Peak Oil Vulnerability Analysis Report, co-ordinated by Dr. Susan Krumdieck of Canterbury University, which included surveys on travel habits, private fuel consumption and vehicle dependence, and the effect of petrol prices. Climate change and the commitment to reduce carbon emissions adds impetus to this Peak Oil Report. An earlier report on the likely impact of

climate change was carried out for the Dunedin City Council (DCC) by University of Otago Emeritus Professor of Geography Blair Fitzharris. (ODT 24/8/2010).

10. The Otago Daily Times reported Mayor Dave Cull as saying "both reports would be used across departments to guide long-term planning" (ODT 7/12/2010). That was 7 years ago and this 10 year plan process provides the opportunity to go back to these reports and consider the recommendations.
11. One of these recommendations was to revision Dunedin as a central urban area with suburbs as urban villages connected by cycleways and a comprehensive electric bus service. These suburban neighbourhoods or villages would be much more self sufficient with more local services, community gardens and orchards, local energy systems and co-housing. Auckland has an ecovillage within the urban area which processes its greywater, has community solar energy, and similar features. As long as land values are determined by the size and type of house a developer wants to build, alternative developments which are more sustainable will struggle to get off the ground.
12. The Council's preferred option for a new Place-based Community Grants Scheme could support such resilient community development in housing, energy, food production, recycling and repairing, ecosystem restoration and water management. Perhaps the 2GP could facilitate these developments through special zoning.

Recommendation: SCAN supports the option of putting $300,000 a year into a new Place-based Community Grants Scheme

13. Perhaps the most important requirement for any community, including a small city, is food security. At the present time Dunedin imports a large percentage of its fresh vegetables from Christchurch and the North Island, but this makes the city vulnerable to natural disasters and to the necessity of reducing long distance transport because of carbon emissions

14. Dunedin City has high class soils, especially around Mosgiel and Outram, which up to 50 years ago produced the majority of the city's fresh produce. Since the 1980s supermarkets have set the price for fresh produce, and rural land values have increased because of pressure for residential development and the increase in dairying on the Taieri Plain. Market gardening was a family occupation but with the loss of all but one full time grower on the Taieri skills have been lost. **It is imperative that Dunedin acts to ensure a secure supply of fresh produce.**

Reccommendation: The Council set up a Forum of local growers, Our Food Network, Good Food Dunedin Alliance, Otago Polytechnic, Taieri College and other interested bodies and individuals to investigate ways of facilitating the establishment of a market gardening industry in Dunedin district with availability of land for leasing and mentoring of would be growers.

15. The development of a strong local economy would be encouraged by the adoption of a local currency. There is considerable literature showing that local currencies encourage the development of strong local communities. There are many such local currencies around the world and the Bristol Pound is one of the best established

Recommendation : the Council investigate the development of a Dunedin dollar.

16. **Central City Upgrade**. SCAN **supports** creating a more people-friendly space in the central city. This is in keeping with reducing carbon emissions by removing cars from the central city and making the city pedestrian friendly.
17. **Tertiary Precinct**. SCAN supports the plan to improve the safety and accessibility of this area and make it more people-friendly.
18. SCAN recognizes that climate change will increase the frequency and severity of weather events with increased risk of flooding, The Council has a responsibility to invest in upgrading the infrastructure to reduce the impact of these events on vulnerable areas of the city like South Dunedin. At the same time the council will need to address the probability that parts of South Dunedin and St Kilda will become unsuitable as residential zones. Some of the existing residents may have to be assisted to move to areas which are above the expected sea level rise. There is no doubt this will be a major issue and will require money from central government to compensate those householders who have to move. This issue highlights the need for the Council to act as quickly as it can to put in place a comprehensive strategy for transition to become a sustainable and resilient low carbon city. (See Transition Towns – an international movement

A Smart Electricity Grid

19. Electricity generation and delivery is yet another essential structural component of our lives that has been handed over to private enterprise and the market. The time has come for Energy Democracy.
20. In 2014 the Ministry of Business, Innovation and Employment convened a group called the Smart Grid Forum. They described a smart grid as "an electricity network that can intelligently integrate the actions of all users and equipment connected to it, in order to efficiently deliver sustainable, economic and secure electricity supplies". We need one of these! The Smart Grid Forum no longer exists as a working group but its work still needs to be done.
21. The privatisation of the electricity sector has hindered the implementation of a smart electricity grid for New Zealand. However there are some developing technologies, and innovative ways of organising the electricity ecosystem, that could offer opportunities to grow a smart electricity grid from the bottom up. Close to home we have the example of the Blueskin Resilient Communities Trust's Blueskin Energy Network (BEN) which facilitates peer to peer sharing of electricity within the community to increase resilience, lower costs and reduce the community's carbon footprint.
22. Looking wider afield there is the German company, Sonnen, which started as a storage battery provider, and is now promoting a "community" of households that generate electricity and have battery storage. To facilitate this Sonnen are looking at the use of blockchain technology through a project examining the economic and technical impact of electricity trading between households within a region using that technology. Some believe the use of blockchain distributed ledger technology will lead to the reshaping the very architecture of the grid itself.
23. If New Zealand is successful in promoting electric cars, and electrified transport in general, we will introduce another challenge - the ability to deliver enough electricity for charging vehicles. While there may be sufficient capacity in total to charge the growing

number of vehicles we will need an intelligently organised storage and distribution system to avoid the problem of growing peak demands. A smart grid is the answer.

24. In the first half of the twentieth century the Dunedin City Council invested directly in the development of the Waipori electricity production project, initially prompted by the desire to support electric trams. Dunedin could take another bold initiative and further assist the development of smart electricity grids, moving beyond New Zealand's current electricity production, distribution and retail arrangements. The DCC could install solar panels on its own properties and use a smart electricity grid to reduce the Council's electricity bills and produce electricity for its own operations including the recharging of electric cars and bikes.
25. **Recommendation: To show support for such developments the Council could add a fifth goal to the DCC Energy Plan 1.0 – "To facilitate the development of smart electricity grid initiatives"**. **With this goal in place the next version of the Energy Plan would include detail on actions the city is taking to support the development of a smart electricity grid.**

The Dunedin City Council car fleet

26. The Dunedin City Council currently uses around 22,000 litres of fuel per month to carry out a wide range of activities and provide services. Nearly all of the transport for council staff is done in Citifleet vehicles. The Citifleet managers are conscious of fuel efficiency and carbon emissions.
27. However, interviews with DCC staff found a lack of awareness of, or concern for, the amount of fuel used in Council activities.
28. In some countries and I think in one NZ city, council staff are able to use electric bikes. The council could also gradually convert Citifleet to electric cars. Most council staff trips are relatively short distances and the spread of fast chargers around the country means it is feasible to travel longer distances, eg Central Otago, Oamaru.