



## Submission by the NZ Centre for Sustainable Cities on Wellington City Council's Draft Low Carbon Capital Plan (as contained in the WCC's Annual Plan 2016/17)

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To [BUSAnnualPlan@wcc.govt.nz](mailto:BUSAnnualPlan@wcc.govt.nz)

This submission has been prepared by Assoc Prof Ralph Chapman<sup>1</sup> and Prof Philippa Howden-Chapman<sup>2</sup>, on behalf of the New Zealand Centre for Sustainable Cities.

### About NZ CSC

The New Zealand Centre for Sustainable Cities is an inter-disciplinary research centre dedicated to providing the research base for innovative solutions to the economic, social, environmental and cultural challenges facing our urban centres. As well as undertaking research, we make submissions from time to time to central government and councils on a range of issues relevant to cities, from climate change policy to compact development. The Centre is currently running a 4-year Resilient Urban Futures Programme, funded by the Ministry of Business, Innovation and Employment, which began in October 2012.

We would welcome the opportunity to speak to this submission.

### Introduction

We strongly support the tenor and direction of this consultation document. There is very little in it with which we disagree, although in some places the measures proposed could be strengthened.

We strongly support Wellington City Council's aspiration to be the "low carbon capital". As plans are developed, we would like to see this aspiration strengthened to "zero carbon capital", but to do so will require more tangible plans in key areas than currently exist.

We support the revised 2020 carbon emission reduction goal of a 10% reduction, reluctantly accepting that only small emissions reductions have been achieved to date.

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The 2050 target could be strengthened to 100% -- this would signal awareness that the latest available scientific evidence suggests that the world needs to aim for net zero carbon emissions by around 2050, or early in the second half of this century. However, adoption of a zero carbon goal would preferably be accompanied by a stronger and more developed transition plan, information provision and awareness raising, which will take more time to work up. We underline that focusing on 2050 cannot be an excuse for delaying action meantime – the LCCP (the Plan) is clear on the necessity of a well developed transition path.

In this submission we briefly comment on the ‘strategic’ parts of the Plan, and then offer specific comments on the three pillars of the Plan.

## **Strategic arguments**

### **Co-benefits of climate action**

We agree, from both analytical and presentational points of view, that there are real and important co-benefits of promoting compact, healthy and liveable cities (refer pp.4,9) (Howden-Chapman and Chapman 2012).

### **Resilience**

Resilience needs to be thought about not only in physical terms but also in economic and social terms, encompassing the ability of the city to adapt creatively to adverse events (Early and Chapman 2013). An important part of this is moving progressively towards a knowledge economy, preferably largely ‘weightless’, but certainly an economy built around quaternary services and products, and using renewable energy.

The physical science of climate change keeps throwing up nasty surprises – such as the possibility of faster sea level rise in the latter part of this century, significantly greater than 1 metre by 2100, and conceivably more than two metres (Hansen, Sato et al. 2015). Such prognostications mean two things: first, that the City needs to do its best now to minimise these risks, by moving as rapidly as practicable towards a zero carbon economy; and secondly, that we should take adaptive measures that will be as robust as possible, and able to adapted as more information becomes available about sea level rise and other manifestations of climate change (Lawrence, Reisinger et al. 2013).

### **Not waiting for central government**

It is clearly not wise or strategic to wait for central government to act decisively on climate change mitigation. Wellington City Council is ethically and practically obliged to take action in advance of central government, in areas such as land use planning, transport, energy and waste management where it can make a difference. We agree with the Council that it should be active in advocacy of action on behalf of the community, in these domains which can “drive down emissions across the city and the country.” (see p.12)

The message as we see it in regard to legacy infrastructure (transport, building and other infrastructure) is that the Council should move early on measures which will have a long-term benefit (see p.13 of the Plan).

One of the key decisions in this domain is around land use, since once an area has been planned for subdivision it is difficult to retrofit more efficient infrastructure, and the likelihood is that sub-optimal and unsustainable transport patterns can be locked in, at least until vehicle technology changes markedly and practices adapt. For this reason, we would encourage the WCC to do everything it can to plan for compact urban form, going further than simply 'maintain[ing] the compactness of our city' (refer p.21 of the Plan). We believe the Council should take measures to relax restrictions on infill housing development in order to allow more intense development in city fringe (inner suburban) areas, while maintaining liveability and the quality of housing development. This will generate long-term savings in carbon emissions. More specific comments on related matters such as the Minimum Parking Requirement are offered below.

### **Comment on the Three Pillars**

We believe (refer p.21 of the Plan) that WCC should be an advocate of building energy efficiency programmes. We support the Warm Up Wellington (p.27) investment and believe the WCC should continue funding of this irrespective of central government funding.

The long term goals set out on p.22 are well stated, but should in our view include a goal relating to compact urban development, e.g.:

“Our urban development is compact and high quality, focussed in areas where public transport access is good, and where housing is readily accessible to amenities. Sprawling development is discouraged.”

We generally support the Plan's position on minimum parking requirements, but believe the stance taken could be stronger. As far as we can determine, nowhere is the MPR a “necessity” (refer p.23).

We strongly support solar power, and believe WCC should work with progressive companies to accelerate this (p.28).

We strongly support all initiatives which foster public transport, active transport and car sharing, including EV charging systems to support EV car sharing. We also believe the WCC should act as a strong advocate of a more environmentally friendly bus fleet for the city and region. GWRC's current plans for diesel buses pose a significant risk to health and the environment – particularly in relation to ambient air emissions, carbon emissions and noise - which is not desirable.

To conclude, we reiterate by thanking the WCC for the opportunity to make this submission, and we would be happy to make an oral presentation on it.

## References

- Early, L. and R. Chapman (2013). Defining resilience: Background paper for the Resilient Urban Futures programme. Wellington, New Zealand Centre for Sustainable Cities.
- Hansen, J., M. Sato, et al. (2015). "Ice melt, sea level rise and superstorms: evidence from paleoclimate data, climate modeling, and modern observations that 2° C global warming is highly dangerous." Atmospheric Chemistry and Physics Discussions **15**(14): 20059-20179.
- Howden-Chapman, P. and R. Chapman (2012). "Health co-benefits from housing-related policies." Current Opinion in Environmental Sustainability **4**(4): 414-419.
- Lawrence, J., A. Reisinger, et al. (2013). "Exploring climate change uncertainties to support adaptive management of changing flood-risk." Environmental Science & Policy **33**: 133-142.