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Submission by the NZ Centre for Sustainable Cities on Greater Wellington Regional Council's new Regional Policy Statement¹

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To: **Greater Wellington, Te Pane Matua Taiao**

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1 The [New Zealand Centre for Sustainable Cities](https://www.nzccsc.org.nz/) is an interdisciplinary and cross-institution research centre dedicated to providing the research base for innovative solutions to the economic, social, environmental and cultural challenges facing our urban centres, particularly around housing, urban design/planning and transport. We undertake a range of research, from journal articles and books to policy papers, as well as making submissions to central government and councils on a range of issues relevant to cities and their inhabitants, from climate change policy to compact urban development.

Summary

2 We **strongly support** Greater Wellington's proposals for change to its Regional Policy Statement ('Change 1')³ which would, among other things, implement directions required by the Government's National Policy Statements on Urban Development and Freshwater Management. This submission focuses on the **climate change**-related aspects of the proposed RPS changes.⁴

¹ <https://www.gw.govt.nz/your-region/plans-policies-and-bylaws/updating-our-regional-policy-statement-and-natural-resources-plan/regional-policy-statement-2022-changes/>

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³ www.gw.govt.nz/rpschange1

⁴ We note, however, that biodiversity preservation is strongly intertwined with climate change mitigation.

3 We believe the proposed changes lay critical groundwork for achieving carbon net-zero by 2050, and we generally support the changes. The particular goals and provisions that we strongly support are:

- a. The commitment by Greater Wellington to approximately **halving** (net) greenhouse gas emissions by **2030**, which would facilitate the region reaching carbon net-zero by 2050;
- b. The 60 per cent reduction (from 2018 levels) in emissions from public transport and a 40 per cent increase in cycling, walking and public transport use by 2030;
- c. The provisions for limiting emissions-inducing sprawl, especially Policies CC.1 and CC.2 (the latter would provide that developers wanting to build a subdivision on the outskirts of the region would have to demonstrate no increase in emissions – whether through the building of the houses and associated infrastructure or by creating heavy car dependency among its residents – before being granted consents).⁵

4 There are many other Objectives, Policies and Methods that we **support**. Important examples include Policy CC.3 (Enabling a shift to low- and zero-carbon emissions transport – district plans); and Method CC.10 (Establish incentives to shift to active and public transport – non-regulatory method). However, we note that there is a significant risk that some of these may be implemented weakly, for example if they are under-resourced. It is vital that these progressive measures be appropriately resourced and implemented actively and urgently, if they are to effectively mitigate GHG emissions.

5 **However**, we do **not** support:

- some of the wording of proposed policies relating to regional urban form / peripheral urban development; and
- the sufficiency of the target of a 35 per cent reduction in emissions from **land transport** by 2030. Our view on this latter point is that the RPS is very helpful, but it will just **not** get us to where we need to be, by 2030 in particular. We believe that, to be consistent with IPCC advice, the land transport emissions reduction by 2030 should be **45%** (details are provided below).

Urban development provisions an important step forward

6 We agree strongly with Greater Wellington Chair Daran Ponter that “Change 1” will significantly influence the shape of the region’s cities and towns through encouraging urban

⁵ Policy CC.2 (Travel demand management plans – district plans) would provide that “By 30 June 2025, district plans shall include objectives, policies and rules that require subdivision, use and development consent applicants to provide *travel demand management plans* to minimise reliance on private vehicles and maximise use of public transport and active modes for all new subdivision, use and development over a specified development threshold where there is a potential for a more than minor increase in private vehicles and/or freight travel movements and associated increase in greenhouse gas *emissions*.” (p.100)

intensification that will lead to lower emissions infrastructure and new, compact housing development around travel corridors:

“The key to change will be thriving centres where everything you need is a 15-minute walk away, linked throughout the region by efficient public transport and active travel networks that make private car use frankly unnecessary most of the time.” (D. Ponter, quoted in Scoop⁶)

7 We applaud this argument as representing a critical step forward, beyond the technology-oriented reliance on a shift to EVs that was evident a few years ago. It is increasingly evident that the most lasting and significant emissions reductions, as well as improvements in wellbeing, can come with a shift in lifestyle to active travel for short trips, and public transport for longer trips, and minimising or avoiding the need for many long or even medium-distance car trips. It is accepted that there will still be a valued place for electric cars, but they are far from the end of the story. The argument is also consistent with the Government’s Emissions Reduction Plan (ERP) and its initiatives under Action 10.1.1 (of Focus Area 1) in particular.⁷

8 We would further add that new development around travel corridors should consider a mix of uses (rather than simply housing) where possible and viable, to further support the creation of walkable neighbourhood environments that support wellbeing through equitable access to essential infrastructure and amenities, including green spaces (Kent & Thompson, 2014).

9 The case for a change to the way we live in our cities, and the need for new transport and land use policies, is supported by a considerable amount of international evidence that we are familiar with, in the academic research literature (e.g. Creutzig et al., 2018; Javaid, Creutzig, & Bamberg, 2020; Lee & Lee, 2020). For instance, Creutzig et al. (2018) note that people’s neighbourhood environment affects behaviour such as transport choices:

‘...physical infrastructure also affects demand. For example, transport-oriented development can lead to low-carbon mobility and accessibility, enabling habit formation congruent with climate mitigation. Such measures are particularly appealing in addressing multiple objectives.’ (p.261).

10 We note the response to the proposed RPS change from one MP, as reported in Carbon News (2022):

‘Former Hutt MP and current shadow leader of the House, Chris Bishop, responded in a Tweet that the move would see fewer houses being built and was unnecessary because New Zealand has an ETS.’

⁶ <https://wellington.scoop.co.nz/?p=146758>

⁷ See p.177 of NZ Government. (2022). *Emissions Reduction Plan, Te hau mārohi ki anamata: Towards a productive, sustainable and inclusive economy*. Retrieved from Wellington: <https://environment.govt.nz/publications/aotearoa-new-zealands-first-emissions-reduction-plan/>

11 We do not accept this analysis. We consider that there is ample opportunity, with an element of creativity and consideration of the wider range of housing typologies possible, to intensify housing development within the existing urban limits of the Greater Wellington (GW) region and, at the same time, enable people to live closer to amenities and transport networks so that their transport carbon emissions can be equitably reduced (Olin et al., 2022}. There need not be any reduction in housing supply. Moreover, we do not accept that the ETS (even if the price of carbon were to rise significantly) would achieve the mitigation achievable by allowing and assisting compact urban development. It is well known that carbon price signals have little effect on certain sectors, including land use (Hall & McLachlan, 2022), whereas urban planning and infrastructure investment decisions have considerable effect.

12 We also note that the revised Objective 16 (Indigenous ecosystems and habitats with significant ecosystem functions and services and/or biodiversity values are protected, enhanced, and restored to a healthy functioning state) is poorly supported by related policies or methods that protect or enhance or restore those significant ecosystem functions. New urban developments around travel corridors offer an important opportunity for protection or enhancement of vital ecosystem functions that in turn provide essential services that support ecosystem and human wellbeing.

Undesirable wording in the proposed RPS change

13 We note that it is proposed that **Policy 55** of Objective CC.6 would now have wording that is weaker, from a climate mitigation viewpoint, than before. To date the wording has been put in terms of maintaining a compact and sustainable regional form, but this is now proposed to be abandoned in favour of expansion that is ‘appropriate’, as can be seen in this extract from the proposed change:

‘Policy 55: Providing for appropriate urban expansion ~~Maintaining a compact, well designed and sustainable regional form~~ – consideration’

14 We see this move away from a goal of compact urban sustainability as highly undesirable and contradictory to the Council’s broader stated intentions. ‘Appropriate urban expansion’ is ambiguous and could mean almost anything. We note that to date the momentum of urban growth has continued to strain the region’s urban form, with the incremental expansion of settlement in several parts of the region, including northern Wellington City, northern and eastern Porirua City, throughout the Kapiti Coast District and in southern Wairarapa. In the absence of clear countervailing planning goals, and with development pressures in such areas that seem oblivious to the desirability of constraining urban form to support climate change mitigation and contain infrastructure costs (Adams & Chapman, 2016), the proposed policy 55 would exacerbate rather than address several important problems identified in Chapter 3.9, particularly “A lack of integration between land use and the region’s transportation network can create patterns of development that increase the need for travel, the length of journeys and reliance on private motor vehicles”.

15 We are concerned that the wording change as shown above could validate and accommodate ongoing spatial urban expansion. Compact development could and probably would be sacrificed. Indeed in our view the change would **not be consistent** with the intent of the National Policy Statement on Urban Development (Government of New Zealand, 2020), especially its Objective 8 (reduction of GHGs) and Policies 1 (c) and (e), relating to provision of ‘good accessibility for all’, and ‘support[ing] reductions in GHG emissions’.

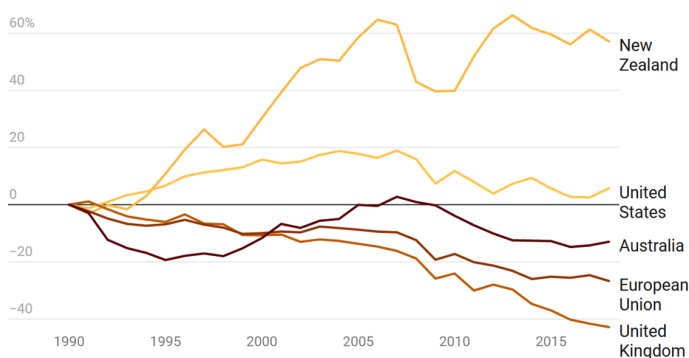
16 In our view, there is very clearly a need for wording that unequivocally supports intensifying urban development within the contiguous urban form of the region, implicitly supporting the vision of the 15-minute city with its focus on local active and public transport, containing infrastructure costs, and significantly reducing GHG emissions below the path they would take otherwise.

17 We would recommend **not** revising Policy 55, but retaining the current wording.

Is the 2030 target sufficient?

18 Given the difficulty of constraining emissions, and on the grounds of practical achievability, it is tempting to endorse the **target of a 35 per cent reduction** in emissions from land transport by 2030 (Objective CC.3).⁸ However, setting a target based on achievability alone would be misguided. The headline target of 35% by 2030 is in our view simply not sufficient, given the severity and urgency of the climate emergency, which Greater Wellington acknowledged in 2019 (GWRC, 2022, p.9), and the growing impatience of the global community around New Zealand’s slowness to act to cut emissions (Daalder, 2020).

Change in net emissions since 1990



Source: UNFCCC · Created with Datawrapper

Figure: Compiled by Daalder (2020)

⁸ Note that 35% is not much short of the Government’s target of a 41% reduction in transport emissions by 2035 relative to 2019, set out on p.172 of NZ Government (2022). *Emissions Reduction Plan, Te hau mārohi ki anamata: Towards a productive, sustainable and inclusive economy*. However, in our view the Government’s ERP is also insufficiently ambitious in regard to transport, and falls short of being fully consistent with the IPCC’s advice.

19 Proposed objective CC.3 specifies:

“net GHG emissions **from transport...** are reduced ...by **2030**, to contribute to a 50% reduction in net GHG emissions from 2019 levels, **including a 35% reduction from 2018 levels in land-transport** generated GHG emissions” (emphasis added).

20 This amounts to a less stringent commitment for land transport than for other sectors, as indicated by the reference to **contributing** to a 50% reduction in net emissions,⁹ and by section 3.1A of Change1, which states that:

“there is still an opportunity to avoid the worst impacts [of climate change] if global net anthropogenic CO₂ emissions [as a whole] are reduced **by at least 50 percent** from 2019 levels by **2030**, and carbon neutrality is achieved by 2050”.(Emphasis added] (p.9)

21 These words do of course represent a global goal. It is apparently good enough for New Zealand to sign up to such ‘global’ wording at Paris in 2015 along with almost the whole world community, but then decide that such a target for 2030 is simply **not** achievable in the **land transport sector** in Wellington region. Wellington is apparently exceptional.

22 Bearing in mind that, in the Wellington region, transport contributes almost 40% of GHG emissions (for 2018-19) and therefore is a key sector for mitigation, the proposed target of 35% stands out as both critical and nevertheless weak.

23 The target also stands in contrast to **Auckland’s** goal of reducing **transport** emissions by **64%** by **2030**, relative to 2016 (Auckland Council & Auckland Transport, 2022).¹⁰ In its TERP,¹¹ Auckland Council state that “Mode shift, electric vehicle uptake, reduction in car trips and every other lever are **all stretched to the limit** of what is possible in eight years to chart a path to a 64% reduction in transport emissions.” (emphasis added). We do not believe the same can be said for Wellington, with the proposed RPS change. Wellingtonians would be far from being stretched to the limit with the proposed target.

24 The less Wellington and the rest of New Zealand achieve on mitigation of land transport emissions, the more other parts of New Zealand, other sectors, and other parts of the world must achieve if the 1.5C warming limit is to be anywhere near attainable. Essentially, the following is the trade-off: either generally affluent Wellingtonians are incentivised and persuaded to cut transport emissions a little more, OR some other (less affluent on average) New Zealanders must mitigate more, OR some other countries (on average less affluent than NZ) must mitigate more, OR the world as a whole will **not** stay within the 1.5C temperature limit. On the evidence to date, the last scenario is the most likely outcome, and implicitly, GWRC is endorsing this highly undesirable outcome if it

⁹ It is noted that local government does not have full control over transport emissions, as noted in para 143 of the section 32 report.

¹⁰ <https://www.greatauckland.org.nz/wp-content/uploads/2022/08/220815-Transport-Emissions-Reduction-Plan-Final-for-Adoption.pdf>

¹¹ TERP stands for Transport Emissions Reduction Plan.

defaults to **not** adopting an adequate level of ambition in regard to transport related emissions.

25 Reflecting the well-publicised conclusions of the IPCC report on 1.5C of warming (IPCC, 2018), it is our view that **the target level of land transport emissions reduction should be 45%** by 2030, against a 2022 baseline. (To visualise the changes, and understand the influence of base years on these numbers, see Appendix 1).

26 We note the point in the section 32 analysis report which comments that, in the case of the preferred option...

‘There is the chance that later regional emission reduction targets may be more ambitious and the policy package no longer adequate, however future amendments can address this... ‘

27 We do **not** believe there is likely to be sufficient time to allow for a change to more stringent and ambitious targets including making adequate changes to the package to reduce emissions **more** by 2050, given the considerable lags in the decision-making system and implementation, and the slowness with which New Zealanders make changes in their transport behaviour, except under exceptionally strong incentives or coercion which are generally inconsistent with democratic governance. That is why setting sufficiently stringent targets now, and explaining why they need to be ambitious, is so vital a part of climate leadership.

28 Some of us have been working on climate change policy since the nineteen-eighties. It is our experience in regard to climate change science that there is high probability of ‘nasty climate surprises’ in years ahead, as Professor Martin Manning (former head of the VUW Climate Change Research Institute) has put it. The global community has frequently in the past encountered such surprises, and in the future is likely to encounter more (Armstrong McKay, Staal, Abrams, & colleagues, 2022).¹² Such disturbing new scientific information usually requires targets to be strengthened, and a more urgent transition set in train. The risks are accentuated by the geopolitical realities of the current largely fossil-based energy system, and the tendency of governments to underperform in delivering on emission reduction pledges.

29 The necessary strategic response is not to avoid this reality, but to acknowledge it and, if anything, over-achieve to rebalance the risks; that is, to formulate and adopt stringent ‘best practice’ policies that accelerate the necessary transitions, while building awareness of why such policies are critical. Greater Wellington still seems some distance from taking this approach.

30 A desirable major step, and one consistent with the courage and pro-activity called for by the NZ Climate Change Commission (He Pou a Rangi)¹³ would be to strengthen now the **target level of land transport emissions reduction to be 45%** by 2030, and to adjust

¹² <https://www.theguardian.com/environment/2022/sep/08/world-on-brink-five-climate-tipping-points-study-finds>

¹³ This call is echoed in the proposed RPS (‘Change1’) at page 8.

now the ambition of subsidiary policies in accord with this target. As noted above in paragraph 20, in the context of the Auckland plan, it is vital that all levers including urban intensification and diversification (mixing of land use), mode shift, electric vehicle uptake, affordable public transport expansion, reduction in car trips, equitable new funding mechanisms including congestion charging, and every other effective lever are **all stretched to the limit** of what is possible in eight years.

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Appendix 1: Visualising the RPS’s proposed reduction of 35% by 2030

The comparison problem

- It is hard to compare a cut of 45-50% by 2030 relative to a **2010** baseline (which the IPCC used in its 2018 advice) against a cut in Greater Wellington’s land transport emissions of 35% relative to **2018**, as GWRC proposes for the RPS.
- The graph below of GW transport-related emissions, from the RLTP, clarifies the problem.
- The proposed cut of 35% is off a high **2018** base (the 30-year peak) of emissions, at 1190kt. A 35% cut would take us to 770 kt (as proposed in the RLTP) by 2030 (red dashed line).

Using a later base

- However, if the **2010** base used by the IPCC is taken instead¹⁴ (i.e. a base of around 1120 kt), and the IPCC-advised cut of 45-50% by 2030 is applied, then the cut would be to around 560-616 kt (to red box, ~ 600 kt). If we compare this red box target to the 1190 kt starting point (2018’s level), then it is clear that 35% is not enough: **a more ambitious percentage** cut must be made, to get to the **red box** target at 600 kt in 2030.
- The required cut from the estimated 2022 level of ‘today’, ~1050 kt, to ~600 kt, i.e. the **green line**, is about 43%, or in round terms, the required reduction is about **45%**.

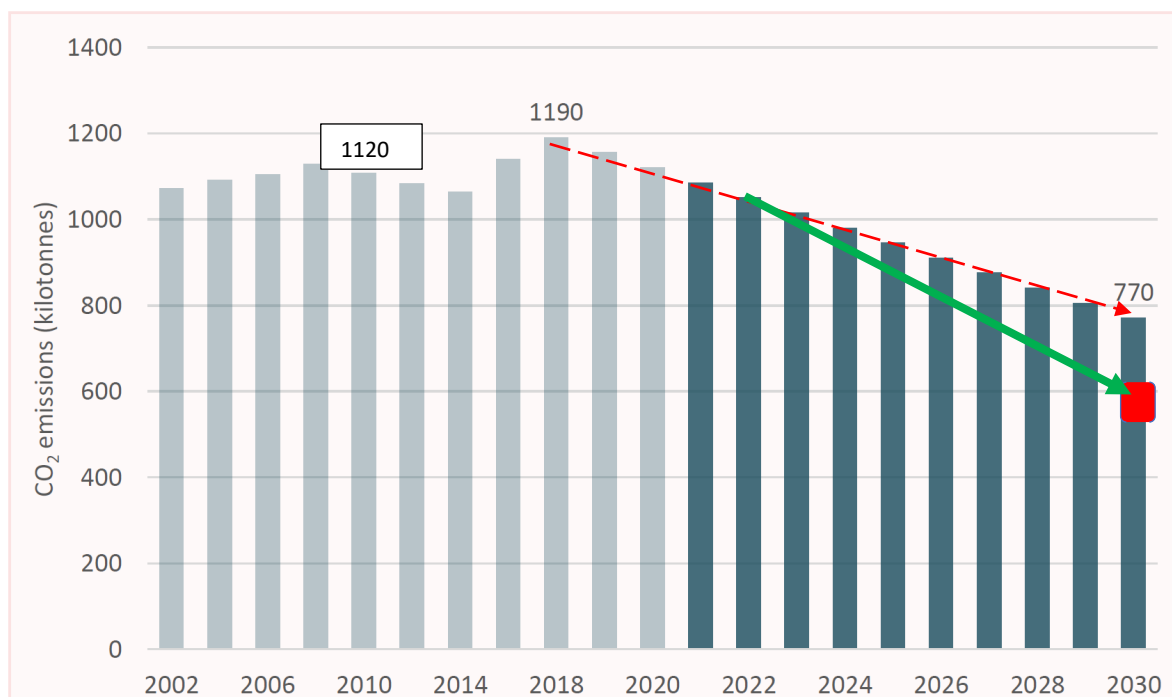


Figure 6: Transport-generated carbon dioxide emissions – 2030 target is a 35 percent reduction

- Note that if GW land transport emissions **had** already dropped by ~15% between 2010 and 2018, then the proposed cut of 35% might have been reasonable, and consistent with the IPCC’s advice, using a 2010 base. However, in fact, GW’s transport emissions rose between 2010 and 2018, so the percentage cut required to attain ~600kt is now greater than 35%.

¹⁴ The IPCC’s Technical Summary states: “In model pathways with no or limited overshoot of 1.5°C, global net anthropogenic CO₂ emissions decline by about 45% from 2010 levels by 2030 (**40–60% interquartile range**), reaching net zero around 2050 (2045–2055 interquartile range).”(p.33) Emphasis added.