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28 March 2021 Attn: Submissions analysis team Climate Change Commission PO Box 24448 Wellington 6142

Climate Change Commission Submission – Urban Design Forum

This submission is made on behalf of the Urban Design Forum (UDF) of NZ.

Introduction

The Urban Design Forum (UDF) thanks the Climate Change Commission for the opportunity to provide comments on the 2021 Draft Advice for Consultation on reducing Aotearoa New Zealand's greenhouse gas emissions.

The UDF supports the Climate Commission in preparing this Draft Advice and for carrying out this consultation process as a necessary step for New Zealand to do its part in reducing its emissions in an effort to manage the global impact of climate change.

Urban Design Forum

The UDF is a membership organisation dedicated to promoting urban design excellence across New Zealand. Membership is open to anyone who is interested in urban design and cares about the quality of the built environment and life in our towns and cities and wants to help raise the standards of urban design across the country. The UDF encourages membership from anyone interested in urban design and including planners, architects, landscape architects, engineers, surveyors, politicians, academics, developers and other individuals.

The UDF promotes and represents a cross-disciplinary approach to understanding our urban environments.

The UDF recognises that creating great quality urban places also depends on a range of other aspects including politics and law-making including financial policies; development economics; social, community and cultural issues; policing; and traffic management to name but a few. The field of urban design can't attempt to resolve all these issues. But where it can help is in the physical arrangement of the components that make up our built environments.

The UDF believes that there are professional urban designers – specialists practising urban design who have been trained to fully understand the art of arranging the elements of the built environment to get the best possible urban design outcomes, which includes helping to meet our goals for Climate Change

Consultation questions

Your one big thing

We consider that way in which we design, live within and do business in our cities and towns is integral to our environmental performance, and for achieving an equitable approach to living now and in the future. We need to be more ambitious in defining the urban form and development we do want, rather than that which compromises and undermines our global future.

Our six big issues

Big issues question 2: Do you agree we have struck a fair balance between requiring the current generation to take action, and leaving future generations to do more work to meet the 2050 target and beyond?

We disagree.

We believe that more needs to be done now that is proposed. We are at a pivotal point in redefining policy (National Policy Statement on Urban Development, Resource Management Act reform etc) that guides our urban futures. The Climate Change Commission have the opportunity, with our support, to make step change in readdressing the balance to create more compact, liveable towns at cities that are more effective in reducing emissions now, and into the future. Our policy direction needs to align with well-considered, staged urban development that prioritises the use of existing resources and infrastructure, before building anew.

We support more proactive intergenerational and multicultural partnerships and approaches that result in towns and cities that are regenerative, well connected, vibrant and liveable places. We do not support the development of towns and cities which create transport and infrastructure inequity, increase emissions and compromise our biophysical world. Currently a large proportion of the infrastructure spend, underway and planned for in Aotearoa, supports an inefficient and high emissions urban development.

We believe that as a relatively wealthy country that values the natural environment and our people's wellbeing, New Zealand should show leadership in global efforts to reduce greenhouse gas emissions. We are a small but highly urbanised population with one of the highest rates of per capita emissions in the world, we need to make deeper and earlier emission reductions than other less developed nations to do our fair share. We recommend that the Commission should be more ambitious in setting its emissions budgets to set a bolder direction for New Zealand's climate action.

Big issues question 5. What are the most urgent policy interventions needed to help meet our emissions budgets? (select all that apply)

All three are needed:

Action to address barriers – Pricing to influence investments and choices – Investment to spur innovation and system transformation

The above policy interventions are not independent of each other. Innovation that addresses/removes barriers with attractive pricing is what is needed.

We need to better target investment. Urban infrastructure including built form and transport have long lifetimes. Investments made in the next five years will lock in carbon emissions for decades to come. Our planning and investment processes need to be rapidly upgraded to consider climate change so that decisions made now don't make it harder to cut emissions in the future. For example, new roading infrastructure built now will result in more emissions over the next decade. There is also a far greater cost to road building than the emissions incurred from private vehicles through the construction itself

and materials utilised, energy required for construction, loss of land opportunity and loss of access to communities via other transport modes.

We need to do more than electrify vehicles, we need to engender true transport choice which requires readdressing our urban form. We cannot continue to promote low density sprawl and the associated environmental, social, cultural and economic impacts of a car-centric transport system. While the proposal to incentivise electric vehicles is a start, the impacts of car centric transport are well beyond the emissions of the vehicles themselves. If we focus only on electrifying the fleet now, we leave future generations with a burden that will get harder and more costly to rectify. The most cost-effective time is now to make the more fundamental moves required. We need to focus on a form of development that favours walking, cycling and low impact transport options.

In Tier 1 and 2 cities we need city form that provides all the ingredients to support mass rapid transit, and then we need to support that through our infrastructure spend, instead of continuing to support the urban sprawl. In all towns and cities we need to set in motion more equitable and supported transport systems now to provide future choice. If need be, we need to invest in supporting developers, public or private, to deliver high quality, compact urban places.

We believe that as a relatively wealthy country that values the natural environment and our people's wellbeing, New Zealand should show leadership in global efforts to reduce greenhouse gas emissions. New Zealand has one of the highest rates of per capita emissions in the world, so we need to make deeper and earlier emission reductions than other less developed nations to do our fair share. We recommend that the Commission should be more ambitious in setting its emissions budgets to set a bolder direction for New Zealand's climate action.

Detailed (consultation) questions on our advice

Questions 15, 19, 20, 21, 22, 23, 24

15. Heat, industry and power

Consultation question

15. Do you support the package of recommendations and actions for the heat, industry and power sectors? Is there anything we should change and why?

We support some of the actions. Please see detailed explanation below adjacent proposed Necessary Action 10 Reduce emissions from urban form.

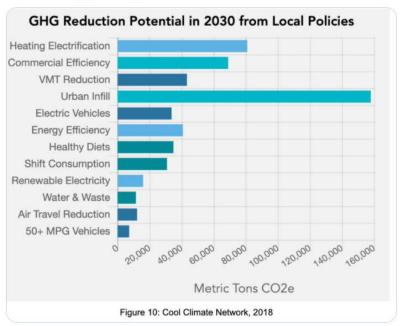
UDF suggests that the inclusion of urban form under heat, industry and power sections overlooks the significant impact of urban form and the construction industry in emission generation.

Urban Form

The Commission's report highlights the importance of a compact city form – of growing up rather than out. However this does not include any analysis on why the market direction has historically been to grow out i.e. the market direction or comparative ease of greenfield development over brownfield or infill development. Without addressing these underlying tensions, including investment where needed, compact cities and towns are difficult to achieve.

It is clear that consideration has been given to current and proposed changes to the resource management framework which guides urban form and development. However there is a conflict with the national direction articulated through the NPS-UD on responding to (and supporting) market led development and urban sprawl that is out of sequence and unplanned (NPS-UD Policy 8). A resolution to this conflict through a clear direction supporting compact rather than sprawling form has not been addressed in the Commisson's report.

Climate researchers at Cal created a local gov't climate policy tool to measure policies based upon how well they reduce carbon footprints. In their analysis of 700 cities, these researchers determined that infill housing has the biggest impact.



Energy Efficient Buildings

We support the recommendation to raise the energy performance of buildings and to expand the services and support available to help developers to raise the performance of their buildings, but consider that this should be expanded as a measure across the development of urban environments more generally. We suggest the Commission better considers whole of life emissions within the infrastructure and building sector. We also suggest that more encouragement and regulation levers are required to achieve low impact environmental design that considers the importance of water systems within our building and urban form.

We also recommend the promotion, encouragement and support of innovative designs that use other materials, or that use less concrete (e.g., by incorporating stronger, or less corrodible reinforcing), reducing use of copper and other metals that contribute to environmental harm, as well as have high emissions in their development. Requiring reporting on embodied carbon footprints would also help this shift.

Necessary action 10 Reduce emissions from urban form

period the Government promote the evolution of urban form to enable low emissions transport and buildings through ongoing legislative reform:

- x. Develop a consistent approach to estimate the of urban development decisions and continually improve the way emissions use, transport and infrastructure investments.
- y. Ensure a coordinated is used across Government agencies and local councils to embed a strong relationship between urban planning, design, and transport so that communities are well designed, supported by integrated, accessible safe cycleways between home, work and education.

We recommend that, in the first budget Urban form decisions are time critical

We agree with developing a consistent approach to estimating the long-term emissions impacts of urban development decisions, however we emphasise that this should be regarded as "time critical". In absence of time criticality, the current wording of this action reads more as an aspiration than a clear action.

In the draft advice the commission states "achieving emissions" long-term emissions impacts reductions through changes to urban form takes a long time." While this is true for large reductions, decisions today on urban form will have consequences within relatively short time frames, given the rate of growth sprawl in our major urban centres. The change needs to consequences are integrated into high emissions living, in low density housing, far from into decision making on land employment centres and requiring infrastructure that councils cannot

Decision making hierarchy needed

Sprawl vs consolidation

To be more specific and directive, we strongly support a coordinated approach to decision making approach to decision making particularly establishing a hierarchy when there are competing or conflicting national directions, with the health and well-being of our planet, and its life supporting capacity, at

> For example, the current general direction promoted by central government allows for increased greenfield development that are considered well-functioning urban environments to address the growing housing crisis. We believe the likely outcomes of this direction conflict with the evidence for lower emissions achievable from increased consolidated urban form and density.

transport options, including UDF seeks clearer direction and supporting recommendations on enabling compact urban form, and establishing a clear hierarchy for competing environmental priorities particularly with regards to greenfield development and urban sprawl. This includes a clear need for investment by government and local authorities to establish a multi-disciplinary and collaborative approach to explore the issues and opportunities related achieving high quality, affordable, low carbon urban form with the necessary upgrades to existing infrastructure to support it.

> Specific actions to use urban form to reduce emissions Some specific areas of action needed are to:

- a) support land amalgamation to accommodate higher density, high quality development
- b) prevent the release of land for low density suburban development, rather if expansion is required, ensure well-planned, urban centres, supported by economic and social infrastructure, and are created that are planned on low impact transport options.

- c) remove the opportunity for private covenants that set minimum sizes for homes that make them less affordable, large and low density.
 d) support the rehabilitation and de-risk brownfield sites that otherwise result in large areas of underutilised land.
- e) enable more diverse development and tenure arrangements to deliver more affordable and liveable residential developments at higher densities.
- f) ensure the creation of urban amenity that supports quality higher density housing.
- g) ensure existing infrastructure upgrades are planned, funded and prioritised (over new infrastructure supporting sprawl) for increased density in existing urban areas.
- h) support the implementation of urban forest plans through incentives and education.

Greenfield development, affordability and agricultural land Opening up more land is often proposed as the solution to housing affordability, what this ignores is the higher cost of living as residents are required to travel further to access daily needs. Converting greenfield land to urban land also reduces the amount of productive farmland we have close to our cities. As well as driving up food costs, by having to access food from further afield or import to Aotearoa, the emissions associated with food increases.

By focusing population growth within existing urban areas, we avoid increasing the distances people have to travel, likely driving, to access jobs, education, services and social connections. This will reduce VKT and consequently emissions.

Increasing density also supports higher levels of service for public transport. Operational costs are one of the major barriers to improving public transport in our towns and cities. Higher densities make it more viable to run high frequency routes all day as there are more residents to use the service and help cover the costs through fares.

Locating population growth within the existing urban area is also more cost effective for infrastructure such as roads and three waters. Research from Auckland Council indicates that the cost of greenfield infrastructure is around \$140,000 per dwelling, significantly higher than brownfield infrastructure (Auckland Council, 2018).

y) Stronger direction on when and how greenfield growth can occur is needed for all urban areas.

For all urban areas over 10,000 in population, new greenfield developments can contribute to lowering emissions, provided that they can show how increases in VKT will be limited. This could be mandated through the RMA reform.

Emissions management in greenfield development will need minimum density requirements to be achieved in order for the below to be affordable and viable:

- Rapid transit infrastructure and/or frequent public transport
- A range of housing typologies and sizes to support the different needs required by different parts of society.
- Local community facilities, shops and schools which minimize the travel required for daily needs.
- Connected to the existing urban walking and cycling networks.

19. Multi-sector strategy

Consultation question

19. Do you support the package of recommendations and actions to create a multisector strategy, and is there anything we should change?

Please see below our support for specific sections and actions from the recommendations report.

6.2.1 Integrate government policy making across climate change and other domains:

"While the Ministry for the Environment holds the lead in terms of the overall architecture of climate policy, the policy levers for the different sectors sit with a range of other agencies. For these other agencies, climate change is not their core business and climate considerations are often crowded out by other priorities.

Another challenge is the lack of 'mainstreaming' of climate change considerations across government policies and procedures. Measures such as tax levers and structures, procurement procedures, and cost benefit and regulatory impact analysis are all instruments that can be used to support climate outcomes, but this is not done systematically, which can undermine climate change goals. Consistent signalling across investments, policy statements, direction to officials and internal policies and directives is important to ensure that all regulatory and policy frameworks are aligned with low emissions objectives."

Necessary action 15 Integrate Government policy making across climate change and other domains

We recommend that, in the first budget period the a) UDF agrees with this action and believes that all Government make progress on integrating policy projects should be consistently assessed in terms making across climate change and other domains of climate change impact. by:

- **Providing** consistent signalling across investments, policy statements, direction to officials, internal policies and directives to ensure that all regulatory and policy frameworks resilience objectives.
- Investigating emissions reduction potentials and interdependencies amongst multi-sector activities, such as food production and distribution, tourism, construction and international education.
- b) We believe there should be greater acknowledgement of the public health benefits of active and public transport. Active transport has a large public good aspect with multi-faceted benefits and should be funded accordingly, with sufficient are aligned with low emissions and climate focus on reducing/removing barriers to walking and cycling and other forms of emerging micro-mobility.

We expect Ministry of Health advice and evidence needs to be better integrated to transport and urban form directions.

- C. Ensuring that central and local government considers climate change alongside other environmental, social, economic and cultural aspects by including Built Environments Act, the Strategic Planning Act and the Managed Retreat and Adaptation Act.
- Requiring government procurement policies to include climate change considerations, in order to leverage purchasing power to support low emissions products and practices, particularly with regard to third party funding and financing transactions.
- Facilitating opportunities for iwi/Māori to participate in ownership of infrastructure or involvement in projects that align with iwi/Māori aspirations and climate positive outcomes.

- c) UDF agrees with this action and sees it as linked to the actions relating to reducing emissions through urban form. All proposals under the proposed Natural and Built Environments Act, requirements in new resource management Strategic Planning, and Managed Retreat and legislation, such as the proposed Natural and Adaptation Act should be required to have net zero emissions. This will encourage personal and/or corporate responsibility for the types of developments which currently contribute to Aotearoa's emissions.
 - d) Agree. In the short-term the government should update procurement strategies ensure they only work with businesses which are working towards being net zero emissions. In the long-term they should only work with businesses who are net zero. This should be supported by financial and capacity building.
 - e) Agree. The Crown has obligations to support tino rangatiratanga. This is one way to do that.

6.2.2 Support behaviour change

"A specific focus on how behaviour change can support climate action, with the input from different communities and stakeholders, would ensure that policies are targeted and fit for purpose."

We strongly support Necessary action 16: Support behaviour change.

The embedded behaviour change we would like to see for the urban form is for living in denser environments to be seen as a meaningful choice (rather than an investment stepping stone). We believe this change requires coupling with close proximity to high quality public amenity and investment in high quality infrastructure.

The embedded behaviour change we would like to see in the transport sector is the normalisation of active and public transport modes for the majority of trips. For trips which cannot be made by active and public transport, behaviour should shift so that these trips are taken using electric vehicles.

Necessary action 16 Support behaviour change

We recommend that, in the first budget period the Government embed behaviour change as a desired outcome in its climate change policies and programmes in order to enable New Zealanders to make choices that support low emissions outcomes.

6.2.3 Require entities with large investments to disclose climate related risks

"The mandatory financial disclosures regime proposed by the Government is an important step in helping to ensure investors, insurers, consumers and others have the necessary information to make informed choices and avoid exposure to climate risks."

We strongly support Necessary action 17: Require entities with large investments to disclose climate related risks.

Necessary action 17

Require entities with large investments to disclose climate related risks

We recommend that, in the first budget period the Government:

- a. Implement the proposed mandatory financial disclosures regime and explore the creation of a similar regime that covers public entities at the national and local level.
- Evaluate the potential benefits of mandatory disclosure by financial institutions of the emissions enabled by loans over a specified threshold.
- 6.2.4 Factor target-consistent long-term abatement cost values into policy and investment analysis "The Government's policy decisions and investments must not lock Aotearoa into a high emissions development pathway or increase exposure to the impacts of climate change. At the moment, there are insufficient safequards in place to prevent this."

We strongly support Time-critical necessary action 6: Align investments for climate outcomes.

Time-critical necessary action 6 Align investments for climate outcomes

To meet emissions budgets and achieve the 2050 a) Agree target, it is important that policy decisions and investments made now do not lock Aotearoa into b) Agree high emissions development pathway. Safeguards and signals will be needed to prevent this, including a specific focus on ensuring long-lived assets such as infrastructure are net-zero compatible. To achieve this, we recommend in the likelihood of Aotearoa being locked into a high first budget period the Government:

a. Immediately start to factor targetconsistent long-term abatement cost in central government. These values should be informed by the Commission's analysis which suggests values of at least \$140 per tonne by 2030 and \$250 by 2050 d) Agree in real prices.

- c) Agree. Business cases need to be assessed in terms of climate change impact, rather than simply job creation. Taking this approach will reduce the emissions future.

Changes to the business case criteria could also be values into policy and investment analysis made to allow small-scale low-carbon transport projects to proceed without requiring an in-depth business case.

- e) Agree. This could be supported by increasing the diversity of who sits at the governance and

Climate Change Commission 2021 Draft Advice – Urban Design Forum Submission 28 March 2021

- b. Encourage local government and the private sector to also use these values in policy and investment analysis.
- c. Ensure that economic stimulus to support transport infrastructure. post-COVID-19 recovery helps to bring forward the transformational investment f) Agree that needs to happen anyway to reach our joint climate and economic goals.
- d. Investigate and develop a plan for potential incentives for businesses to retire emissions intensive assets early.
- e. Require the Infrastructure Commission to include climate change as part of its decision- and investment-making framework, including embedded emissions and climate resilience
- f. Investigate and develop plans to mobilise private sector finance for low emissions and climate-resilient investments.

management levels of the organisation. The Infrastructure Commission could seek out people with experience delivering active and public

Progress indicators

- a. Government to start, as soon as possible and by no later than 31 March 2022, factoring targetconsistent long-term abatement cost values into policy and investment analysis.
- b. Government to publish, as soon as possible and by no later than 31 March 2022, how the COVID-19 economic stimulus is helping to accelerate the climate transition.
- a) Agree
- b) Agree. Additionally, some penalty should apply to the government if they do not meet accelerate climate change goal through the Covid-19 recovery stimulus.

6.2.5 Building a Māori emissions profile

We support Necessary Action 18: Building a Maori emissions profile.

Necessary action 18 Building a Māori emissions profile

We recommend that, in the first budget period the Agree. We support measures which enable iwi and Government facilitate a programme and direct funding to support Māori-collectives (particularly at an iwi level) to capture and record their own emissions profile within their respective takiwā. This will give effect to rangatiratanga by enabling iwi/Māori-collectives to effectively manage and monitor their emissions and enhance intergenerational planning.

Māori-collectives to exercise tino rangatiratanga, as long as they are supported by funding and capacity building measures.

Climate Change Commission 2021 Draft Advice – Urban Design Forum Submission 28 March 2021

Consultation question

21. Our Nationally Determined Contribution (NDC) -Do you support our assessment of the country's NDC? Do you support our NDC recommendation?

We support the recommendation.

Consultation question

22. Do you support our recommendations on the form of the NDC?

We support the recommendations.

Consultation question

23. Do you support our recommendations on reporting on and meeting the NDC? Is there anything we should change, and why?

We support the recommendations.