

REFBC BC Climate Leadership Plan Submission: **Phase 2 Consultation March 2016**

This submission provides comments from the Real Estate Foundation of British Columbia (REFBC) on the BC Government's January 2016 Consultation Guide for the Climate Leadership Plan (CLP). It supplements [REFBC's previous submission on the CLP submitted in October, 2015](#). We continue to encourage the Province to consider all these recommendations in developing the CLP.

REFBC supports the Climate Leadership Team's package of 32 recommendations and endorse a goal to move quickly on implementation with most policy commitments in place by the end of 2016. We recognize and support a strengthened carbon tax as an essential policy tool for reducing carbon pollution across all sectors of the economy, while targeting support for emissions-intensive, trade-exposed sectors and vulnerable populations. We encourage the government to implement the package of CLT recommendations as a minimum bar for a strong plan.

In addition, REFBC strongly recommends that further strategies be developed and incorporated into the CLP to address the essential role of integrated land use and transportation in reducing per capita building, infrastructure, and transportation emissions across BC.



Healthy and Resilient Communities (Consultation Guide, p. 6)

The consultation guide acknowledges that designing cities that are more walkable and livable reduces energy use and costs, improves air quality, saves commute time and helps instill active lifestyles.

***Comments:** Although CLT recommendations offer some broad direction in this area, there are missed opportunities for more specific strategies that reflect the groundswell of work underway in BC which can and should be leveraged. Evidence abounds related to the potential GHG reductions and other co-benefits of reducing congestion and vehicle trips as well as managing per capita building emissions through improved land-use planning, urban design, and public transportation. Transit-oriented development and location-efficient development need to be emphasized in relation to the Province's future growth.*

A recent study led by Clean Energy Canada (conducted by the CD Howe Institute and funded by REFBC, 2015) found that our land use and transportation systems are costing the region between \$500 million and \$1.2 billion a year in visible and hidden economic losses due to wasted time in traffic and forgone trips, in addition to costs of GHG emissions and impacts on health and quality of life. The City of North Vancouver's 100 Year Sustainability Vision (developed in 2009 with the UBC Design Centre for Sustainability and REFBC funding) found that 31% of the targeted emission reductions, on a per capita basis, can be achieved through urban form decisions alone.

Tools for better measuring and evaluating the full costs and co-benefits of varying land use and transportation choices, and increasing public and government understanding of their implications, [are available](#) and should be part of the CLP strategies. Specific examples are highlighted in comments on "What We Value", "The Way We Live", and "The Way We Travel".



What We Value (p.7, 14)

The consultation guide notes that respondents to the CLP Discussion Paper feel climate change is a serious issue. It also identifies "what we value" as a top priority and indicates the "cost of climate change needs to be considered when important decisions are made about the future of our province."

Comments: *The public values reduced energy use, climate action and sustainable transportation. A recent [public opinion research poll commissioned by the REFBC](#) indicates that at least two-thirds of British Columbians want more energy efficiency (73%), green buildings (68%), sustainable transportation (66%) and public transit (66%). The majority (61%) also want more smart growth.*

To better reflect these values, the CLP needs detailed policy recommendations on integrated land-use and transportation planning. The GHGe reductions and economic benefits of reducing congestion, vehicle trips and managing per capita building emissions are greatly influenced by land-use planning, urban design, and public transportation.

Recommendation #1

Local and regional governments and the Province need better access to tools that can compare the full costs of land use and transportation choices, and facilitate integrated solutions at the local, regional and provincial level.

Examples include:

- **District Energy Planning Models**¹ - Transforming inefficient and spread out communities to more efficient, compact communities is challenging and costly. Current land-use decisions influence whether or not district energy systems can be implemented in the future. Plan4DE, for example, is designed to be used in neighbourhood planning processes by providing a high-level assessment of District Energy options.
- **Places+Spaces Sustainable Development Model**² - Places+Spaces is another tool that traces relationships between levers and impacts. It incorporates community-specific data in assessing economic, infrastructure, health, ecosystem, energy, emissions and quality of life outcomes of a policy or development decision. The goal is to facilitate broader uptake of such practices among local governments by embedding life cycle costing into standard accounting practices and pro formas, such as the infrastructure planning decision support tool developed by the Ministry of Community, Sport and Cultural Development.
- **City InSight Energy, Emissions and Finances Model**³ - City InSight evaluates existing and potential municipal policies and actions on energy and GHGe. The model has guided the development of energy and emissions targets and actions for 30 municipalities and regional governments in Canada.
- **UBC Collaborative for Advanced Landscape Planning - Community Energy Explorer and other tools**⁴ - The CALP tool assessed options for achieving 80 per cent reduction in building-related GHGe by 2050 in three existing BC neighbourhoods. Researchers found that while this reduction was technically feasible, current policy would only achieve 35 to 50 per cent reductions.⁵
- **Lifecycle Costing Infrastructure Tool**⁶ - Life cycle costing (LCC) is used to strengthen fiscal performance as well as contribute to a reduction in energy use and GHGe.
- **Community Infrastructure Planning Decision Support Tool**⁷ - This tool enables local governments to compare the long term (100-year) infrastructure costs of different development scenarios in a way that integrates financial, engineering, planning and environmental perspectives. Information can then be shared with residents and developers as a basis for land use planning decisions.

¹ See <http://plan4de.ssg.coop/>

² See <http://placesandspaces.ssg.coop/>

³ See <http://cityinsight.ssg.coop/>

⁴ See <http://calp.forestry.ubc.ca/projects/> and <http://energyexplorer.ca/>

⁵ MODUS October, 2015. Built Environment for British Columbia, Synthesis of Findings and Strategic Recommendations for REFBC and Partners.

⁶ See <http://www.toolkit.bc.ca/tool/life-cycle-costing>

⁷ See <http://www.toolkit.bc.ca/Plan-Do/Community-Infrastructure-Planning-Decision-Support-Tool>

- **Asset Management for Sustainability - Enabling Integrated Planning and Development Decisions**⁸ - Asset management and sustainability initiatives often share strategic goals, address common risks and opportunities, affect the same operational processes, and engage the same people. Improving the linkages between them leads to better long-term outcomes. Training and tools have been developed and shared through the Federation of Canadian Municipalities and other partners to build a deeper understanding of asset management and the type of interdepartmental collaboration required to support operational, planning and development decisions, and to better integrate asset management with land use planning and analyze different development options.
- **Eco-Asset Management**⁹ -Natural capital assets provide clear advantages over engineered (or grey) infrastructure. They: are cheaper to operate and maintain, if not degraded; may provide “free” ecosystem services; do not depreciate if properly managed; are carbon neutral or even carbon positive. Extensive work has been done on Eco-Asset Strategy by the Town of Gibsons that could be used as a model for other communities.



The Way We Live (p.17-18)

The guide notes that “The Way We Live” was identified as a key priority by respondents to the CLP Discussion Paper. They wanted “less travel and energy use to be a priority in community planning.”

Comments: *The CLT recommendations mostly focus on individual buildings rather than how buildings are integrated with community planning and travel. Policy recommendations in the CLP should be expanded to address this gap.*

CLT recommendations include only one general strategy for community planning: “*update the Climate Action Charter to align provincial and community goals*”. This is a missed opportunity. Conventional land use practices that have separated homes, jobs, and shops from each other in low-density, auto-oriented patterns for the past 50 years, have significant associated GHG emissions. Compared with compact, mixed-use development, sprawl typically increases per capita land consumption 60 to 80 per cent and motor vehicle travel by 20 to 60 per cent.¹⁰ Low-density, auto-oriented land-use has negative health and economic outcomes. For example, a recent report¹¹

⁸ <https://www.fcm.ca/home/events/past-conferences/2016-sustainable-communities-conference-post-conference-resources/training-asset-management-for-sustainability-%E2%80%94-enabling-integrated-planning-and-development-decisions.htm>

⁹ See *Town of Gibsons' Eco-Asset Strategy* February 3, 2015.

¹⁰ See Boston, A. January 28, 2016 (Presentation, Community Energy Symposium), New Westminster, BC. - <http://www.questcanada.org/files/download/a6878dfd87dcadf>

¹¹ *Sustainable Prosperity*, (October 2013) *Suburban Sprawl: Exposing Hidden Costs, Identifying Innovations* <http://thecostofsprawl.com/>

indicates that Canada spent \$29 billion on road maintenance and development, yet only collected \$15.5 billion in related revenues.

Recommendation #2

Update the Climate Action Charter

The 2007 Climate Action Charter helped most BC communities make commitments to become carbon neutral by 2012. Out of 188 municipalities, 180 have signed the B.C. Climate Action Charter. It is time for a review and update of the Climate Action Charter including: new tools and incentives for measuring and reporting on community's greenhouse gas emissions that also work to create compact, more energy efficient communities; continued support for accurate, readily accessible and up-to-date Community Energy and Emissions Inventories for all local governments and partner organizations; a reinvigorated Provincial 'Green Communities Incentive Program Working Group' (circa 2007-08) with a strong mandate.

Recommendation #3

Align Local Government enabling mechanisms and areas of authority with sustainability objectives and smart growth principles

Policies and practices in many communities support traditional development patterns that subsidize sprawl. Enabling incentives (e.g. tied to rezoning or DCCs) could instead support smart growth, compact communities, green infrastructure and eco-assets. Development Cost Charges (DCCs) generally do not recover the full cost of new infrastructure in suburban developments, in effect passing these costs on to taxpayers. Amending the *Local Government Act* to allow local governments to set DCCs that cover some or all of the long-term costs would reduce this financial liability. For example, the City of Penticton created a DCC bylaw that provides a 50 per cent reduction for developments that meet a specified performance level against a sustainability checklist that includes solar hot water, photovoltaics, geoexchange and wind options.

Recommendation #4

Support use and implementation of new models and tools for local and regional governments that align the financial rules of the system with sustainability objectives¹²

These include eco-asset strategies, natural capital and full cost accounting in infrastructure and planning decisions; asset management for sustainability that integrates planning, engineering, finance, risk management and transportation decisions; and tools such as the Community Infrastructure Decision Support Tool for land use and development decision making.

¹² See FCM - <https://www.fcm.ca/home/events/past-conferences/2016-sustainable-communities-conference-post-conference-resources/training-asset-management-for-sustainability-%E2%80%94-enabling-integrated-planning-and-development-decisions.htm> See also Town of Gibsons Eco-Asset Strategy - <http://www.gibsons.ca/eco-assets>

Recommendation #5

Support better public engagement and understanding of the alignment between land use and transportation decisions and community values for healthy, livable, resilient communities

Research community values in relation to the built environment, identifying where values appear to align and conflict with policies and practices necessary to reduce GHGe. Recent public opinion research on built environment sustainability in BC¹³ shows British Columbians view greenspace, nature and the environment as the most precious assets. Transportation infrastructure is identified as the biggest unmet need. Most British Columbians have strong support for energy efficiency, green buildings and smart growth in their communities, and they value the benefits of density over urban sprawl. There is also strong support for mixed-income rental housing and high-density low rise developments; however, the majority also appear extremely ambivalent to 'compact communities' and many are not supportive of highrise high density development. There is also evidence that some British Columbians have gotten mixed messages about the affordability of sustainability.

Recommendation #6

Ensure Regional Growth Strategies and Official Community Plans have GHG reduction targets embedded, and provide support, tools, incentives for local government Community Energy and Emissions Plans implementation, monitoring and updates.



The Way We Travel (p. 20-21)

The Consultation guide indicates respondents supported more clean, coordinated transportation such as public transit and shared travel.

Comments: CLT recommendations focus almost entirely on fuel standards and zero emissions vehicles, with only one general recommendation for supporting public transit and other mobility options that reduce GHG emissions. On its own, a switch to electric vehicles will not address the high per capita infrastructure and building costs (and associated carbon emissions) of single occupancy vehicle travel and its associated land use patterns, and could work at cross purposes to emissions reduction goals. Policies in the CLP should reflect public interests and significant opportunities to reduce per capita GHG emissions through integrated land-use planning that accompanies public transit and active transportation.

¹³ See [Public Views on Sustainability and the Built Environment](#) (Public Opinion Research conducted by McAllister Opinion Research on behalf of REFBC, 2015)

Recommendation #7

Support smart growth principles through the integration of transportation and land-use planning, with a coordinated effort at the provincial, regional and local levels

Create stronger policy and planning alignment and help the public understand the value of shifting to more sustainable patterns. Increase market penetration of medium-density, small-scale, and affordable housing forms that are in keeping with comfortable community character while supporting active transportation and public transit.

Recommendation #8

Secure significant and consistent senior government funding for public transit

Funding for roads remains much higher than for the more efficient modes of moving people: transit, walking and cycling. Transit funding has stagnated while demand and ridership have increased. Bicycling's share in most jurisdictions lags their mode share, and is dependent in part on the availability of safe cycling routes (ideally separated from traffic). Given the level of public interest¹⁴, the aging of the Baby Boomer generation, and the efficiency of our transit providers, now is an ideal time to invest more in transit, cycling and walking.

Recommendation #9

Support stronger regional coordination of integrated transportation and land use planning, policies, investments and targets

Local government leadership is focused on buildings, equipment, and potentially neighbourhoods to reduce GHGe. Regional planning could play a more prominent role. For example, there are no minimum requirements for regional sustainability strategies or targets, and no tools for regional districts to enforce their plans if member municipalities choose to ignore them. Such strategies would ensure that growth is managed and coordinated at the regional level. Because municipal Official Community Plans need to align with Regional Growth Strategies (RGS), RGS's can provide a framework for coordinated planning approaches and more informed decision-making. This could include establishing GHG reduction targets with milestones in Regional Growth Strategies and OCPs.

Recommendation #10

Establish a provincial working group on integrated land use and transportation

REFBC sponsored the [Community Energy Symposium](#) that consulted with over 150 practitioners on the Climate Action Plan Consultation Guide in January 2016. Panel discussions highlighted gaps in strategies to reduce GHGe associated with land use, development, and transportation and identified a need for a provincial-level working group on integrated land use and transportation. It was noted

¹⁴ See [Public Views on Sustainability and the Built Environment](#) (Public Opinion Research conducted by McAllister Opinion Research on behalf of REFBC, 2015)

that the current Built Environment Working Group focuses on building related regulations, and the Transportation Working Group focuses on transportation and technology, rather than the GHG emission reduction opportunities related to integrated land use and transportation/mobility planning and development. To address this, it is recommended that a CLP Working Group on Integrated Land Use and Transportation be established to:

- Identify provincial policy currently working to assist local government in reducing sprawl and building compact, complete communities;
- Identify mechanisms that currently “subsidize” and facilitate sprawling land-use patterns, i.e. municipal powers to establish parking minimums;
- Develop a comprehensive analysis of tools/options/policies/regulations, etc., that should be addressed in order to provide local governments with the ability to properly direct growth;
- Gauge trade-offs and generate viable solutions that provincial staff could include in the CLP.



Concluding Comments

The Climate Action Leadership Plan 2.0 presents a critical opportunity for renewed progress on essential climate action goals for BC and Canada. Despite significant effort and attention by many organizations over the last 20 to 30 years, BC’s built environment itself is generally not becoming more sustainable and the trajectory of GHG emissions have gone up in recent years. The Foundation strongly encourages the Province to turn its goals for reduced emissions into concrete actions based on the recommendations above. We recommend the Plan be accompanied by informed, science-based policy, implementation and accountability levers, and the necessary resources to ensure critical outcomes for BC are achieved.

About the Real Estate Foundation

The Real Estate Foundation of BC is a philanthropic organization that helps advance sustainable land use in British Columbia. It provides grants to non-profit organizations working to improve BC communities and natural environments through responsible and informed land use, conservation and real estate practices. Its funding programs support research, education, and law and policy reform. Since 1988, the Foundation has approved more than \$70 million in grants.

For more information, visit www.refbc.com

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