CSLA | AAPC
Canadian Society of Landscape Architects
Association des architectes paysagistes du Canada

2020 Pre-Budget Submission to the House of Commons Standing Committee on Finance

Climate Emergency: The Required Transition to a Low Carbon Economy

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submitted by

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Recommendation # 1 — That federal funds be dedicated to implementing (i.e., coordination, communication, and action) low carbon resilience at all levels of government and society to stimulate the transition to a low carbon economy.

Recommendation #2 — That the federal government include the requirement for landscape architecture services within government departments.

Recommendation #3 — That federal procurement emphasize climate change and low-carbon resilience criteria as part of a qualifications-based selection criteria when sourcing all services, including those of landscape architects.

Recommendation #4 — That the federal government provide major funding to eliminate silos between scientific, planning, and design professions through the creation of multi-disciplinary, collaborative, climate change teams, to emphasize the value of ecology and nature-based systems in the transition to a low carbon economy.

Summary

"Integrated climate action must be embedded as business as usual within all policy, planning, regulation, and professional practice. Achieving this will require LCR (low carbon resilience) tools, practices and processes that can be used by all levels of government and professional sectors in their efforts to update education and training, codes and standards, funding and planning approaches, and to make widespread implementation of LCR both attractive and practical."
— **Low Carbon Resilience: Best Practices For Professionals, Final Report, December 2018**

The Canadian Society of Landscape Architects is pleased to submit this brief as part of the 2020 federal pre-budget consultations.

Landscape architects design communities to adapt to the climate emergency and to transition to a low carbon future. We are aware of many initiatives planned by the federal government, and welcome those outlined in, for example, the *Pan-Canadian Framework on Clean Growth and Climate Change*.

The CSLA was founded in 1934 and is the voice of more than 2,500 landscape architects across Canada. As the voice of the profession, the CSLA is an advocate for its members on matters including urban design and renewal, social justice and Indigenous issues, sustainable communities, and climate change.

The theme of this year's budget consultations is timely and stark. This is a climate emergency and the magnitude of the problem can seem overwhelming. A climate emergency demands a well-coordinated emergency response plan. Given Canada's exorbitant per capita carbon emissions, there is clearly much that needs to be done. People are now recognizing the gravity of climate change, but they continue to struggle with how best to make positive change.

Landscape architects work to accommodate both the needs of human society and the natural environment, respecting the cultural landscapes of the past, and planning sustainably for the future. Landscape architects play an integral role in the processes of planning, design and management of outdoor spaces of all sizes — from small urban courtyards to National Parks. We aim to mitigate the contribution of greenhouse gases to the atmosphere, promote ingenuity and resilience in individuals and organizations, and ensure the sustainability of our natural environment.

As the challenges associated with a changing environment mount, Canadians are struggling to find economic and political balance between short-term solutions and long-term planning for sustainability. A major hurdle our society must overcome is termed the "implementation deficit". The term is used to identify communities and individuals unable to act due to lack of coordination, resources and expertise.

In 2014, the Canadian Society of Landscape Architects established the Climate Change Task Force, which became the Committee on Climate Adaptation (CoCA) in 2017.

The goals of the CoCA are to:
• bring national and local perspectives on our changing environment
• promote improved understanding of new science
• facilitate the dissemination of emerging tools and lessons learned from shared experience

The CoCA advocates for the issue of climate adaptation as an integral part of the work of landscape architects. The CSLA and all of its 9 component associations have also ratified the International Federation of Landscape Architects' *Global Accord: Adaptation for a Changing World*.

This brief focuses on four recommendations directly related to the theme "Climate Emergency: The Required Transition to a Low Carbon Economy". By implementing these recommendations related to government planning, procurement, and federal funding for multidisciplinary, collaborative climate change teams, landscape architects will be better able to contribute their expertise to transitioning to a low-carbon economy.

The work of landscape architects touches many aspects of the Canadian economy and its growth. Nationally, the estimated GDP contribution from landscape architecture in 2014 was over $1Billion, and has typically grown by over 10% annually. Economic activity in the landscape architecture industry has a multiplier effect nationally of 2.1, meaning that every dollar input into landscape architecture generates $2.10 of economic activity. Every $1Million in landscape architecture project expenditures creates 12.83 jobs nationally. As of June 2015, there were 851 landscape architectural firms in Canada. The economic activity in the landscape architect profession will only increase as we advance design that builds on mitigation, adaptation, and a low carbon society.

Our common future depends on building an economy that is resilient — an economy that is sustainable because it works to mitigate and adapt to climate change. If Canada does not purposefully work toward climate-change readiness, our businesses, our jobs, our economy and productivity will falter. Alternatively, if we invest further in adopting and promoting low

carbon resilience and climate-change readiness, we could well become world leaders sharing our expertise not just across Canada, but also globally.

Recommendation #1 — That federal funds be dedicated to implementing (i.e., coordination, communication, and action) low carbon resilience at all levels of government and society to stimulate the transition to a low carbon economy.

Low carbon resilience is design that both mitigates emissions and adapts to the changing climate. By combining mitigation and adaptation strategies as two halves of a single path, we can reduce emissions, sequester carbon, and enhance sustainable societies.

Ecological services provided by natural systems are becoming increasingly recognized for their contribution to reducing global emissions and sequestering carbon, and their capacity to ameliorate the impacts of severe weather and a changing climate. Natural systems can provide valuable co-benefits when integrated with built environments. These initiatives need to be applied collaboratively and coordinated across society.

Landscape architecture builds, enhances and protects natural systems:

- urban trees and forests
- riparian systems, lakes, wetlands, shorelines, and nearshore freshwater and marine environments
- public and private open space
- grasslands
- low carbon footprint green roofs
- individual sites and connected systems
- green modes of transportation

Landscape architects are advocates for an ecosystem-based approach to policy, planning, design, and decision-making. The federal government is the level of government best equipped to provide the resources required to support all communities and levels of government in the transition to low carbon resilience and a low carbon economy.

Recommendation #2 — That the federal government include the requirement for landscape architecture services within government departments.

Landscape architects are on the forefront of visioning and re-visioning urban and rural communities, and contributing to low-carbon regional economies and sustainable growth.

The profession of landscape architecture and its contribution to low carbon design is relevant across all government departments including transportation, infrastructure, public works, environment, health, agriculture, and others.

While landscape architects are involved in some government departments, it is important that landscape architecture be recognized as a profession which cuts across the traditional borders of departments and is able to apply a climate lens in projects related to Indigenous People, women, seniors, and on issues as diverse as agriculture, health and public safety. Therefore, landscape architects should be engaged in all projects that include engineers, architects or planners.

Landscape architects are a self-regulated profession whose services are key to designing outdoor spaces, including the spaces between buildings and, at times, on top of or within buildings. Given the wide range of cross-cutting services provided by the profession of landscape architecture and the ability to contribute low carbon design solutions to improve our economic resilience, it is key that federal government departments include landscape architects on projects and in consultancies.

Landscape architects can apply low-carbon resilience in transitioning our economy by:

- leading and collaborating in multidisciplinary teams on adaptation
- promoting resilience and sustainability in environments, systems, and structures
- employing nature-based solutions to stormwater management through low impact development, infiltration systems, treated disposal
- recognizing natural assets, such as urban tree canopies and urban natural areas as a component of urban infrastructure and as carbon sequestering/sheltering assets
- assisting with needed changes to environmental assessment, policies, by-laws, and regulatory instruments
- integrating planning and design for climate change into existing university programs
- providing continuing training and tools for practitioners

Recommendation #3 —That federal procurement emphasize climate change and low-carbon resilience criteria as part of a qualifications-based selection criteria when sourcing all services, including those of landscape architects.

If we are to respond to the climate emergency, a climate lens needs to be integral to all procurement processes undertaken by the federal government. Life-cyle costs and carbon footprint, low carbon resilience and sustainability, must be among the main determinants of procurement, rather than simply the lowest-bid.

Budgeting for this criteria will enable the federal government to lead by example, and help advance innovation in low carbon resilience and the transition to a low carbon economy. It will emphasize the reality of the climate emergency and push the transition to a low carbon economy by those applying for federal contracts.

Recommendation #4 — That the federal government provide major funding to eliminate silos between scientific, planning, and design professions through the creation of multi-disciplinary, collaborative, climate change teams, to emphasize the value of ecology and nature-based systems in the transition to a low carbon economy.

The CSLA believes that if the federal government advances multi-disciplinary, collaborative, climate change teams at all levels there will be an opportunity to harness the current concerns over climate change, create a multiplier effect through coordinated action, and avoid lethargy or paralysis from setting in due to overwhelming challenges.

These multidisciplinary teams could include landscape architects, architects, planners, engineers, politicians, public service staff, emergency services, community organizations and residents, social services, health workers, contractors, suppliers, economists, accountants, lawyers, financiers, insurers, among others. (Adaption Primer #2, p.46)

Our increased understanding of the scope and timing of severe weather and climate change is strengthening the resolve of design and planning professionals to work collaboratively to mitigate greenhouse gas emissions in work for which we are responsible. We aim to advance initiatives to protect, restore and enhance natural environments, and to design and build green infrastructure both for their benefits in sheltering human populations and their contributions to sequestering carbon.

In conclusion

The CSLA believes that fund allocation through the federal budget when combined with the expertise and work of landscape architects and allied professions can have a significant impact on communities transitioning to a low carbon economy. The climate emergency, and the will to move toward a low carbon economy is evident, but the resources required to do so need to be based on a comprehensive climate lens, adequate federal funding for communities, collaboration, and multi-disciplinary teams.

Resources for consideration:

CSLA Livable Communities

The Climate Atlas

The International Federation of Landscape Architects Global Accord

Adaptation Primers

LP magazine - Lo! Carbon

Low Carbon Resilience: Best Practices for Climate Change Professionals - Final Report -

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