Building a better Canada through greater investment in sustainable infrastructure

Hoop and Holler controlled cut 2011 - Manitoba Infrastructure Photo

Mary Van Buren is President of the Canadian Construction Association

Red River Floodway - Manitoba Infrastructure Photo

By Mary Van Buren

Canada's wide-ranging geography and climate has always presented challenges for infrastructure project planning, design and construction. The construction industry has a track record of successfully building infrastructure that stands up to the test of time.

We are presented now not just with what is arguably an existential challenge – preparing for climate change and the risks of more frequent extreme weather events – but opportunities to drive greater innovation and sustainability in construction.

Governments are prioritizing climate resilience in infrastructure investment programs and the Canadian construction sector is excited to play its part in "building back better" and leading in this area.

The Canadian Construction Association has developed a research paper, *Strength, resilience, sustainability: Canada's construction sector recommendations on adapting to climate change,* to increase awareness of the importance of sustainable and resilient infrastructure that can withstand the effects of climate change.

Warmer temperatures, increased precipitation and extreme weather events like flooding, ice storms, tornadoes and fires will need to become a normal consideration when planning public infrastructure projects.

The COVID-19 pandemic has also created an opportunity for jurisdictions to prioritize climate action as part of their economic recovery strategies.

Research indicates that the benefits of investing in community adaptation and resilience at the front-end outweigh the cost of such investments by a ratio of six to one.

The recent announcement of Canada's first-ever National Infrastructure Assessment is an important first step, but governments must also be prepared to lead the way through investment programs and by adapting procurement policies to defray resilience costs.

Projects that include innovative materials and concepts, despite costing more up front, should be given consideration. Programs are also needed to financially incentivize businesses of all sizes, particularly small and medium-sized enterprises (SMEs), to access and embrace emerging and sustainable technologies, materials, or processes.

The federal government has an opportunity to collaborate and partner with industry to ensure that large-scale infrastructure built today can better withstand the weather patterns and climate shocks of tomorrow.

Strength, resilience, sustainability outlines key opportunities for how industry and government can invest in green infrastructure, and how the higher upfront costs in sustainable construction can lead to significant environmental and financial savings over the long term.

Building Canada's clean economy requires that the federal government work in partnership with provinces, territories, and municipalities as well as industry stakeholders, to change the way public infrastructure projects are determined and funded.

Buildings, roads, bridges, and highways will need to be more resilient and now is the time to act on this objective. With the 2019 edition of the *Canadian Infrastructure Report Card* (CIRC) showing that Canada's aging public infrastructure is in serious need of rehabilitation or replacement, there is an opportunity to re-shape our communities in a more sustainable manner.

CCA has been advocating for a 25-year blueprint for infrastructure investment in Canada. A forward-looking, long-term plan with prescribed annual commitments, including for training and innovation, could help pave the way towards a climate resilient infrastructure development program.

Without changes to existing practices that do not prioritize climate resiliency in infrastructure, climate change costs for Canada could escalate from roughly $5 billion per year in 2020 to between $21 and $43 billion per year by the 2050s.

As governments prepare their COVID-19 recovery plans, they must integrate appropriate policies and investment programs that allows for the construction of resilient infrastructure.

Capacity building for climate change adaptation through investment and policy frameworks that support businesses is essential.

The principles of sustainable development are fundamental to how government, industry and society will successfully address critical societal needs, environmental pressures, and climate change impacts.