



*This Position Paper introduces a series of Policy Briefs focused on Ecosystems and Biodiversity, Green Infrastructure and Food Systems to be released in the coming weeks. The **Building Back Better Post COVID-19 Task Force** was established by the [Canadian Commission for UNESCO](#) and the [UNESCO Chair on Food, Biodiversity, and Sustainability Studies](#) at Wilfrid Laurier University.*

INFRASTRUCTURE INVESTMENTS FOR A GREENER, MORE RESILIENT AND SUSTAINABLE COUNTRY

Ideas and considerations for Canadian decision-makers

The COVID-19 crisis has brought into sharp focus our individual and collective vulnerability – both to the virus itself, and to its indirect socio-economic, environmental and political implications. Responding to the pandemic through adaptive, strategic and greener infrastructure investments can protect and restore ecosystems critical to long-term environmental and socio-cultural well-being. These proactive initiatives can green the economy through transformation to decarbonized energy systems, develop and protect regional resources and distribution systems for food and energy, and meet basic human needs while fostering community resilience. These infrastructure investments need to facilitate and support autonomy and vibrancy of Indigenous communities, meeting the Call for Action as part of our commitment to the Truth and Reconciliation process. As

well, a commitment to equity must inform these investments to ensure that they impact even the most vulnerable Canadians. Importantly, this provides a way to meet our commitments under the 2030 Agenda for Sustainable Development and would provide important examples at the nexus of humanitarianism and development. The stimulus package for the Canadian economy can be implemented with these insights firmly in mind. If done right, this would position Canada as a world leader through integrated policy and programs in support of physical, natural and social infrastructure across the country.

As an unprecedented moment in history, the COVID-19 crisis creates entry points to accelerate long-term change through short-term spending. Given the certainty of future health, climate and other crises, the pandemic compels us to think ahead adaptively and strategically. We have the chance to mitigate crisis-induced impacts, and to simultaneously prepare a strong network of green essential goods, services and infrastructure. Fundamentally, the pandemic crisis has thrown into stark relief the precarity of economies built on oil and gas, as well as the environmental costs of our deeply rooted reliance on environmentally problematic industries such as plastics. It is critical that all our public investments are proofed against the ‘clean and green principle’ and that they further our pursuit of circular economic systems that supports community equity and resilience. These basic goods and services, including equitable access to healthy food, clean water and air, basic universal income, green energy and shelter, can be put in place for all Canadians at all times to ensure ongoing resilience. We can decide on a future that is proactively green, healthy, just, economically robust and inclusive, or one that relies on unsustainable infrastructure, rooted in a fossil fuel economy and outdated technologies.

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The Government of Canada has led the way through the [COVID-19 Economic Response Plan](#). With unemployment rates surpassing those seen in the Great Depression of 1929, a package of measures has been

announced to prevent the mass bankruptcy of industries and SMEs. A key question now as we plan to lift COVID-19 lockdown measures, is *how* to use infrastructure investments to bolster our adaptive capacity, ecological integrity and competitiveness moving forward? In some cases, there are existing commitments that can be pivoted in response to the new realities post-COVID-19, while in others, new and ambitious responses are warranted. This paper explores both. Investments in distributed green energy systems, low impact social housing, green roofs, local ecological food systems, and building on Canada's Sustainable Development Strategy through communities all take us toward a more resilient future.

GOVERNANCE

To achieve these goals, we need to recognize the strengths that have carried us through the pandemic: communities helping themselves – neighbours, families and community organizations – with support from governments at all levels to ensure people are as safe and healthy as possible. Governments at all levels have proven they can react swiftly to enable community well-being. In the face of the pandemic, the [federal government's emergency initiatives](#) proved cross-cutting, including support for individuals, businesses and industry. Provincial and territorial governments have similarly mobilized the health and education sectors to provide large-scale and coordinated pandemic responses, at the same time setting in place a framework for altered economic activity. Municipal governments across the country have also reacted vigorously by, for example, adapting community support services and programs to online spaces and providing information for residents, as well as emergency food assistance.

Post-crisis initiatives can be equally robust, multi-scalar and comprehensive. They can include targeted support such as green infrastructure to regenerate and protect the environment and our country's unique ecosystems; ensure access to affordable, healthy and culturally-appropriate food that provides fair livelihoods to farmers; robust health care; fast and reliable Internet connectivity; green energy and transportation; and stable incomes across populations. They must also ensure the well-being of the most vulnerable with particular attention to First Nations, Métis and Inuit peoples, Black communities, and people of colour, women, low income individuals, children and the elderly.

The pandemic experience underscores the need for connectivity and coordination across governments, civil society and the private sector. Supportive, socially minded and green policies and programs can be in place from local governments, including cities, through regional and provincial bodies to the federal level to foster and streamline change. These initiatives would allow community action to reach people immediately, so need to be as mutually supportive as possible. For example, regional food systems require provincial and municipal regulations that enable processing and distribution infrastructure. This in turn requires federal crop insurance support for ecological growing. Green infrastructure can be responsive to community needs and consider local ecosystems and biodiversity, yet connect to larger grids, be mindful of economies of scale and attract funding from higher levels of government.

INDIGENOUS PATHWAYS

The commitment to reconciliation must continue and the pandemic has made this even clearer. Indigenous voices must be represented and heard as reconciliation needs to be a key issue in this conversation and any path forward in keeping with the Truth and Reconciliation Commission's Calls to Action. Racism has increased during the crisis and is playing out in real ways on the ground. For example, there is increased community policing and pandemic bylaw enforcement in Indigenous communities and among people of colour relative to other groups. While it is important to consider how the pandemic has impacted mainstream infrastructures and culture, it is imperative to not lose the perspective from communities that are not mainstream and the ways the crisis plays out differently in communities where basic infrastructures, including access to clean water or basic health services, has never existed in the first place. First Nation, Métis and Inuit communities can build on the [federal commitment](#) to support Indigenous individuals, communities, organizations and businesses. For example, there has been investment in Indigenous tourism in recent years because of its potential to bring jobs and economic development to Indigenous communities. The complete shutdown of tourism now poses a significant challenge to Indigenous communities as they cope with and then emerge from the crisis. Responses to the COVID-19 crisis provide opportunities to learn from Indigenous systems and world views, including communities, ecosystems and food systems that are already localized and robust.

ECOSYSTEMS AND BIODIVERSITY

We must invest massively to protect and restore our ecosystems, particularly those that contribute to the maintenance of biodiversity and the physical, psychological and cultural wellbeing of communities. We need to reconsider and value the goods and services these ecosystems and natural infrastructures provide to us throughout the year. Resilient and thriving ecosystems are key to mitigating or avoiding the impact of future pandemics and other major crises, such as tornadoes and floods that are increasing in severity with associated economic and social devastation. In particular, we could direct some of our future investments to the protection and restoration of the vast natural infrastructure, including but not limited to coastal zones, wetlands, forests, rivers and lakes.

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In fact, to support biodiversity conservation, protected areas need to increase significantly over the next few years to meet biodiversity targets for Canada beyond 2020. We could make use of the many sites designated by UNESCO such as biosphere reserves, global geoparks and world heritage sites as well as the Canadian-led International Model Forest Network. They all mobilize key local and regional actors through multi-actor engagement to enact community-led transformation. Education and research can advance common goals for ecosystem conservation and sustainable development in line with the Sustainable Development Goals. Special focus should also be placed on protecting and revitalizing natural environments and ecosystems in urban areas, where an increasing proportion of the world's population is concentrated year after year.

FOOD SYSTEMS

Food is a portal to myriad socio-economic and environmental factors, and a food systems lens offers

many pathways for sustainable change. More robust local ecological food systems can allow Canadians to withstand shocks to the global supply chain. We can make food a permanent essential service established under the COVID-19 crisis response. This could be a key step to recognizing the centrality of our food system – to build toward better farmer livelihoods, workers' rights, and food access. As we focus efforts on the protection and restoration of ecosystems, we can also ensure fisheries, aquaculture, agriculture and the overall agro-ecosystem are more sustainable and resilient. The food system is fundamental to preserving the well-being of Canadians and their communities. Local ecological food systems can help protect ecosystems and biodiversity, support just livelihoods through fair wages and ensure social justice by fostering food security. For example, compensating producers for their ecological stewardship would have environmental benefits through better soil, sequestered carbon, and improved water quality. ALUS Canada, a farmer-led organization that invests in farmers and ranchers who reduce their ecological footprint through agricultural stewardship offsets offers one model that can be implemented across the country to enable this transition. Financial support for this critical ecosystem service work would help to stabilize farm incomes. There is a pressing need for more flexible, integrated, regional marketing systems so that producers, processors, distributors and purchasers can work together. Regional infrastructure including food hubs, community and incubator kitchens, farms, processors, distributors, retailers, and restaurants can all ensure food security and revitalize local economies. Creating and connecting regional infrastructure can help ensure communities can respond to multiple shocks including pandemics and climate change.

GREEN INFRASTRUCTURE

Since its first budget in March of 2016, the Government of Canada has made clear its commitment to large-scale public investment in [Canada's infrastructure](#). This includes infrastructure in Indigenous communities, with the intent of updating local water and wastewater facilities, promoting green energy, building out public transit, and helping Canada meet its greenhouse gas mitigation targets, as well as ensuring that our infrastructure is climate resilient. Avoiding putting funds into projects that involve fossil fuels is key to meeting these targets.

Yet the COVID-19 crisis has brought about major changes in our economic, social and political dynamics that must now be quickly factored into a more rapid and larger-scale rollout of infrastructure investment and development. First, the mass move to working at home is very likely to have longer-term consequences for the way that large public and private sector institutions, as well as many small- and medium-sized businesses, operate, which will in turn require attention to the energy needs and efficiency of the residential sector and local communities. Moreover, there are real concerns that people – now conditioned to believe that social distancing will be needed over at least the shorter- and medium-term – will be reluctant to use mass public transit. Analysts fear a concomitant increase in single-occupancy vehicle use, which may mean a rethinking of the intersection between public transit, low-emission vehicles and electrification infrastructure, all at the community level. And, while the pathways of transmission are still being investigated, new information on how the COVID-19 virus moves through communities will force governments in Canada to pay attention to certain infrastructures, like water sanitation, that have been only slowly renewed. Critically, growing understanding of the links between climate change and economic, social and health vulnerabilities necessitate a continued focus on reducing our carbon footprint and minimizing climate change.

CONCLUDING THOUGHTS

While COVID-19 has plunged Canada and the world into a multifaceted economic, health and social crisis, it also creates lever points to accelerate long-term changes through short-term spending focused on ecosystems and biodiversity, green infrastructure and regenerative food systems. This can create conditions to pivot more flexibly in the face of new crises. We have the chance to mitigate crisis-induced impacts, while at the same time, prepare a strong network of essential goods, services and infrastructure. COVID-19 shows us that we can choose a different path in the long-term interests of future generations – one that is proactively green, healthy, just, economically robust and inclusive.

*The **Building Back Better Post COVID-19 Task Force** brings together Canadian experts that are proposing economic recovery measures that would make our communities stronger in a post-COVID-19 world.*

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