



DELIVERED BY EMAIL

To: adaptation@ec.gc.ca

Re: Canada's National Adaptation Strategy

July 15, 2022

Please accept this as a written submission from the Canadian Environmental Law Association (CELA) on the National Adaptation Strategy published in May 2022.

We welcome the opportunity to provide a response to the Government of Canada's National Adaptation Strategy. CELA urges the government to prioritize the disproportionate impact of climate change on vulnerable and low-income communities in all of its climate-related policies, proposals, and strategies.

A. Background on CELA

CELA is a public interest law clinic established in 1970 dedicated to environmental equity, justice, and health. As an Ontario legal aid clinic, CELA provides free legal services to qualifying low-income, vulnerable, and disadvantaged communities. Additionally, CELA works on law reform and legal education initiatives in Canada.

B. Canada's National Adaptation Strategy Must Emphasize Environmental Justice

Although the National Adaptation Strategy provides that climate-related responses and approaches must be considered through an equitable lens,¹ CELA urges the Government of Canada to adopt concrete proposals to emphasize environmental justice. Environmental justice is defined as:

“the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation and enforcement of environmental laws, regulations and policies.”²

The Intergovernmental Panel on Climate Change (IPCC) confirms that vulnerability to climate change differs substantially within and among regions depending on inequity and marginalization linked to gender, ethnicity, and low-income.³ The IPCC further affirms that maladaptation to climate change disproportionately affects marginalized and vulnerable groups, thereby reinforcing and entrenching prevailing inequalities.⁴ This disproportionate impact is especially prevalent in Indigenous communities that are dependent on healthy ecosystems for their basic needs and their cultural identity.⁵

¹ Government of Canada, “Canada's National Adaptation Strategy” at page 17.

² United States Environmental Protection Agency, online: <https://www.epa.gov/environmentaljustice/learn-about-environmental-justice>.

³ IPCC Working Group II, “Climate Change 2022 Impacts, Adaptation and Vulnerability. Summary for Policymakers”, online: https://www.ipcc.ch/report/ar6/wg2/downloads/report/IPCC_AR6_WGII_SummaryForPolicymakers.pdf at page 14.

⁴ IPCC Working Group II, “Climate Change 2022 Impacts, Adaptation and Vulnerability. Summary for Policymakers” at page 29.

⁵ IPCC Working Group II, “Climate Change 2022 Impacts, Adaptation and Vulnerability. Summary for Policymakers” at page 14.

Recommendation 1: At least 40% of federal climate investments go directly to vulnerable and low-income communities.

The United States signed Executive Order 14008 which announced its goal of directing 40% of the overall benefits of federal climate, clean water and energy, affordable housing, and other investments to disadvantaged and marginalized communities.⁶ This initiative is entitled “Justice40”.⁷

California’s Senate Bill 535 requires that a minimum of 35% of California Climate Investments reach priority populations including disadvantaged and low-income communities. California has far exceeded this minimum with \$4 billion or 50% of project dollars currently benefitting these target populations.⁸

Delaware passed Resolution 40 to implement the Justice40 initiative. Resolution 40 establishes a committee to ‘locate and help organize disadvantaged communities to ensure that these communities derive the full benefit of these credits, grants, and loans to improve the overall quality of life.’⁹

CELA urges the Government of Canada to implement a similar initiative to ensure that at least 40% of federal climate-related initiatives are directed to low-income, disadvantaged, and marginalized communities. We recommend that Canada utilizes California’s plan and Delaware’s legislation as a template for execution.

Recommendation 2: Detailed emergency planning for climate-related disasters with a low-income lens, based on identified threats.

The consequences of climate change, including flooding and wildfires, disproportionately impact marginalized and low-income communities. These communities are often more vulnerable because they reside in lower-quality housing that lacks climate-resilient features. As part of its flood mapping and wildfire mapping, we urge the Government of Canada to identify low-income, vulnerable communities and create detailed emergency and evacuation planning for these individuals.

The Government of Canada must also prioritize low-income and disadvantaged communities in disaster relief planning. As part of its Restore Louisiana Homeowner Rehabilitation, Reconstruction and Reimbursement Program, the state aids homeowners in covering costs for the repair or replacement of damage to property due to flooding.¹⁰ This funding is first directed to individuals that are of low-income, elderly or have a disability, and who did not have flood

⁶ The White House, News and Updates, “Delivering on Justice40” (December 2, 2021), online: <https://www.whitehouse.gov/ceq/news-updates/2021/12/02/delivering-on-justice40/>

⁷ Justice40, online: <https://www.thejustice40.com/>.

⁸ California Climate Investments 2021 Annual Report, online: https://ww2.arb.ca.gov/sites/default/files/auction-proceeds/2021_cci_annual_report.pdf.

⁹ Delaware HCR40 2021-2022.

¹⁰ State of Louisiana Proposed Master Action Plan for the Utilization of Community Development Block Grant Funds in Response to the Great Floods of 2016, online: https://www.doa.la.gov/media/hxjmbnxv/floods-master-action-plan_clean_06jan17.pdf at page 73 .

insurance.¹¹ Canada should implement similar initiatives that target priority communities after a climate-related disaster.

Recommendation 3: Targeted programs for low-income communities with an allocated budget. These projects can provide co-benefits that protect community health as a climate adaptation measure.

We urge the Government of Canada to fund projects that are directed to disadvantaged communities and that will provide co-benefits to concurrently protect community health.

a. Transportation

California allocated \$19.5 million to its Sustainable Transportation Equity Project and \$704.4 million to its Community Air Protection Initiative. The former funds clean transportation initiatives for low-income communities to address their transportation needs, increase access to key destinations, and reduce greenhouse gas emissions.¹² The latter project involves consultation with community groups to implement an initiative to improve local air quality. Initiatives include grants to replace older, high polluting vehicles with newer models that have zero-emission technology, or funding to upgrade schools to reduce toxic or smog-forming pollutants.¹³ Currently, 77% of the Community Air Protection Initiative funding has gone to disadvantaged communities, 20% to low-income households and only 3% to other areas of California.¹⁴

Both initiatives concurrently benefit community health by improving air quality through reducing volatile organic compounds, nitrogen oxides, particulate matter, carbon monoxide, and sulphur oxides.¹⁵

b. Urban Forestry

California allocated \$77.8 million to its Urban and Community Forestry Program that prioritizes urban forest expansion in disadvantaged communities.¹⁶ Through evaporative cooling and shade provision, trees reduce the urban heat island effect.¹⁷

As heat waves are expected to increase in length, frequency, and intensity because of climate change, this urban forest expansion initiative is critical to providing relief in extreme heat events. Heat waves disproportionately impact vulnerable Canadians, including those that reside in

¹¹ State of Louisiana Proposed Master Action Plan for the Utilization of Community Development Block Grant Funds in Response to the Great Floods of 2016, at page 74.

¹² California Climate Investments 2021 Annual Report at page 55.

¹³ California Climate Investments 2021 Annual Report at page 42.

¹⁴ California Climate Investments 2021 Annual Report at page 42.

¹⁵ Government of Canada, “Air pollution from cars, trucks, vans and SUVs” (February 23, 2017), online:

<https://www.canada.ca/en/environment-climate-change/services/air-pollution/sources/transportation/cars-trucks-vans-suvs.htm>

¹⁶ California Climate Investments 2021 Annual Report at page 70.

¹⁷ Loughner, CP, Allen, DJ, Zhang, DL, Pickering, KE, Dickerson, RR, & Landry, L. (2012). Roles of urban tree canopy and buildings in urban heat island effects: Parameterization and preliminary results. *Journal of Applied Meteorology and Climatology*, 51 (10), 1775-1793.

socially or materially deprived neighbourhoods.¹⁸ Green spaces in lower-income neighbourhoods are more often under-maintained, of lower quality, less numerous, and smaller as compared to higher-income neighborhoods.¹⁹ Therefore, these areas require extra protection against the urban heat island effect and must be prioritized in any urban forest expansion plan.

c. Building Retrofits

Retrofitting buildings with air-conditioning or other active cooling mechanisms to keep temperatures under 26°C can save lives during extreme heat events. As aforementioned, low-income, and disadvantaged communities face higher risks for mortality during heat waves. A report published by the Government of British Columbia, entitled “Extreme Heat and Human Mortality” found that 98% of heat-related deaths in the summer of 2021 occurred indoors in homes without adequate cooling systems.²⁰ Additionally, retrofitting low-income homes and rental units with flood protection mechanisms will simultaneously decrease the risk of harm from mould and other contamination.²¹

CELA recommends that the Government of Canada prioritizes building retrofits for climate adaptation in low-income and disadvantaged communities that face the highest risk during flooding and extreme heat events.

Recommendation 4: The Government of Canada should complete Low-Income Barrier Studies to identify the economic, social, psychological, technological, and political challenges faced by low-income and vulnerable communities in adapting to climate change.

Barriers faced by low-income and disadvantaged Canadians are unique and magnified depending on demographic, geographic, and cultural characteristics. Therefore, it is particularly important to develop equitable solutions for these citizens. California’s Senate Bill 350 mandated the completion of Low-Income Barrier Studies to understand the barriers faced by low-income communities in accessing solar photovoltaic energy and other renewable sources, zero or near-zero emission transportation, and weatherization.²² The California Air Resources Board outlined many such barriers that may be relevant to Canadians:²³

- Lack of ability to purchase clean vehicles due to high costs and unavailability of convenient home and public charging stations²⁴

¹⁸ Government of British Columbia, “Extreme Heat and Human Mortality: A Review of Heat-Related Deaths in B.C. in Summer 2021” (June 7, 2022), online: https://www2.gov.bc.ca/assets/gov/birth-adoption-death-marriage-and-divorce/deaths/coroners-service/death-review-panel/extreme_heat_death_review_panel_report.pdf at page 17.

¹⁹ Anguelovski, I., Connolly, J. J., Garcia-Lamarca, M., Cole, H., & Pearsall, H. (2019). New scholarly pathways on green gentrification: What does the urban ‘green turn’ mean and where is it going? *Progress in human geography*, 43(6), 1064-1086.

²⁰ Government of British Columbia, “Extreme Heat and Human Mortality: A Review of Heat-Related Deaths in B.C. in Summer 2021” at page 5.

²¹ National Collaborating Centre for Environmental Health, “Floods: prevention, preparedness, response and recovery” (November 24, 2021), online: <https://nccch.ca/environmental-health-in-canada/health-agency-projects/floods-prevention-preparedness-response-and->

²² California Energy Commission, online: <https://www.energy.ca.gov/rules-and-regulations/energy-suppliers-reporting/clean-energy-and-pollution-reduction-act-sb-350>.

²³ California Air Resources Board, “Low-Income Barriers Study, Part B: Overcoming Barriers to Clean Transportation Access for Low-Income Residents”, online: https://ww2.arb.ca.gov/sites/default/files/2018-08/sb350_final_guidance_document_022118.pdf.

²⁴ California Air Resources Board, “Low-Income Barriers Study, Part B: Overcoming Barriers to Clean Transportation Access for Low-Income Residents” at page 26.

- Lack of credit cards and bank accounts for utilizing carsharing options or purchasing reloadable public transit cards²⁵
- Lack of access to sidewalks, benches, bike lanes, shade, streetlights, and other measures needed for walking, biking, and public transportation²⁶
- Low-income, rural communities may lack access to broadband internet, leaving residents unable to obtain information on clean vehicles and consumer incentives, public transportation, maps of public charging stations, and more²⁷

CELA encourages the Government of Canada to complete similar barrier studies to develop measures that best address and tackle the needs of low-income and disadvantaged communities.

Recommendation 5: Data-driven strategies to track climate action and equity.

The City of Boulder, Colorado generated a data repository to track progress on key performance indicators to help the government define and prioritize climate-related goals. To further integrate data, the city developed a decision-making matrix including scoring items related to equity benefits and community health to decide how to invest funds.²⁸

Canada should integrate concrete data in all of its climate policies to track and to ensure progress on equity and other climate initiatives. Tracking this progress will allow the Government of Canada to best utilize and target funding.

Recommendation 6: Ongoing consultation with low-income and vulnerable communities.

Asking for submissions in response to the publication of the National Adaptation Strategy is a helpful initiative. Proactive outreach, keeping in mind accessibility issues, by the Government of Canada to low-income, vulnerable, and marginalized communities must be prioritized to best understand and target their needs.

Conclusion

Canada's National Adaptation Strategy must address the disproportionate impact of climate change on low-income and vulnerable communities through budgeted, data-driven, targeted plans that prioritize their needs. CELA looks forward to continuing to provide our insight on other detailed proposals on climate adaptation and mitigation in Canada.

²⁵ California Air Resources Board, "Low-Income Barriers Study, Part B: Overcoming Barriers to Clean Transportation Access for Low-Income Residents" at page 26.

²⁶ California Air Resources Board, "Low-Income Barriers Study, Part B: Overcoming Barriers to Clean Transportation Access for Low-Income Residents" at page 25.

²⁷ California Air Resources Board, "Low-Income Barriers Study, Part B: Overcoming Barriers to Clean Transportation Access for Low-Income Residents" at page 31.

²⁸ From Climate Data to Climate Action: Experiences From The City of Boulder, Colorado, USA, online: <https://iclei.org/wp-content/uploads/2022/04/Boulder-case-study.pdf> at page 4.