

July 15, 2022

Re: Building Resilience to Acute Climate Disasters through a National Adaptation Strategy

On behalf of the Surrey Board of Trade and its 6,000 business contacts which employ over 60,000 employees, we write to express our position on the National Adaptation Strategy. Our submission is in support of the submissions provided by Climate Proof Canada.

Awareness of the effects of climate change has been amplified in Canada in recent years by the remarkable floods, wildfires, and heat waves that have damaged infrastructure, destroyed personal property and claimed lives. Canada's emissions reductions plan has been sold to Canadians as an effort to limit future risks. However it is clear that Canadians are facing these risks now and equal effort must be made to protect lives and property this decade.

Participants in the National Adaptation Strategy (NAS) Advisory Tables have identified two overarching challenges that a successful NAS should address:

- I. **Long-term transformational goals, strategies and plans** to address the well-defined slow onset effects of climate change such as community displacement due to sea level rise, Arctic food security challenges related to melting permafrost and ecological degradation due to a shifting climate.
- II. **Clear near-term outcomes and targets** to reduce Canada's vulnerability and exposure to acute and rapidly intensifying climate hazards. These hazards include floods, wildfire and heat. Windstorms and hailstorms are also intensifying; however, their impacts are not as widespread.

The **Disaster Resilience and Security Advisory Table** and **Climate Proof Canada** have focussed on the second challenge and our submission details an approach to address it. However both challenges should be explicitly addressed in an NAS.

The NAS should establish clear goals for a resilient Canada by mid-century where resilience is defined as protecting Canada from both acute disasters and slow onset events. Those goals should be achieved through a succession of five-year plans spanning 25 years of effort (following the approach pioneered in the United Kingdom). Each five-year implementation plan should be designed to drive whole-of-society efforts to attain the outcomes and meet the targets it identifies. The first five-year plan should run from April 2023 to March 2028. In 2027, that plan should be reviewed, adjusted and a new five-year plan developed for the following period. An implementation plan should identify the policies, programs and actions needed to attain those outcomes and meet those targets within a specified timeframe.

A National Adaptation Strategy for Canada must focus on risk reduction from disasters which are already being amplified by climate change. This is not all it should do, however, climate risk reduction must be a core component of the strategy. “Risk” is driven by three factors: hazard, exposure and vulnerability.

To successfully drive climate risk reduction, a National Adaptation Strategy must focus, in part, on:

- I. Understanding the changes in climate hazards (flooding, wildfire, heat) that regions across Canada will face given different Representative Concentration Pathway (RCP) scenarios. Natural Resources Canada and Environment and Climate Change Canada have laid the foundation for this work, however it must be downscaled to be relevant at the community and neighbourhood level;
- II. Establishing desired outcomes and related targets expressed as a measurable reduction in community exposure to these hazards, given the most likely emission reduction (RCP) scenario; and
- III. Establishing desired outcomes and related targets expressed as a measurable reduction in physical and financial vulnerability to floods and wildfires and physical vulnerability to heat given the most likely RCP scenario.

With this in mind, The Surrey Board of Trade, in collaboration with Climate Proof Canada is compiling plans to result in very clear outcomes. For example

- Elderly Canadians living in low income apartments in places like Montreal and Vancouver will not be hospitalized or die in an extreme heatwave;
- Over a third of the high risk homes facing waterfront flooding – from PEI to the St Lawrence Valley, from the Red River Valley to the Columbia River will be protected;
- Significantly fewer Canadians will be displaced by wildfires in northern Ontario and central BC, with a particular focus on Indigenous communities;
- Canadians who are displaced, whether by fires, floods, wind or ice storms, will be back in their homes, where appropriate, within two years. We will all learn from Lytton and do better.

We are focussed on reducing risk from the three leading climate perils facing Canada in the short-term – **flood, wildfire and heat** and an all-hazard focus on **recovering** from these events. For each of the three perils identified, we recommend a four-step process:

1. Risk identification: Identify the highest exposed/vulnerable communities and properties/people. This should be completed by developing the best available modelling, adjusted for various emissions scenarios. Risk identification should be completed by 2023 for

flood, 2024 for wildfire, and 2025 for heat and should build on the national risk assessment and flood hazard modelling work completed by Public Safety Canada;

2. Risk Communication: Develop and implement a risk communication plan for each peril and focussed on all Canadians but particularly targeting those at high risk. Implementation should occur within one year of risk identification being complete for that peril;

3. Risk Reduction: Invest in risk reduction through public sector investments by all orders of government and public/private partnerships catalyzed by the Canada Infrastructure Bank. In the first five-year phase, efforts should be focussed on those at highest exposure and vulnerability. We are working with Climate Proof Canada and the Advisory Table on Disaster Resilience and Security to develop targets, outcomes, outputs and inputs needed to achieve risk reduction of the three leading climate perils facing Canada in the short-term – **flood, wildfire and heat**.

4. Incentivizing Resilience: Communication isn't enough. Communities and individuals must be incented to act. A resilience incentivization plan should be developed by 2023 to be co-led with the private sector and implemented within two years of risk identification being complete. Examples of resilience incentive programming include premium discounts by insurers, mortgage rate incentives by lenders, and property level risk disclosure by realtors.

Finally, we are working with Climate Proof Canada and the Advisory Table on Disaster Resilience and Security to develop the targets, outcomes, outputs and inputs needed to improve recovery from climate-related disasters. The Canadian Red Cross is still supporting families displaced by the 2016 Fort McMurray fires and 2017 Eastern Canada floods. Cleanup in Lytton has not started a full year after the wildfire that ravaged the town. We need to prevent displacement from climate events through investments in community resilience. If displacement does occur, Canadians should expect clear timelines for returning to their homes where appropriate.

Our organization is contributing to the development of a National Adaptation Strategy framework and full implementation plans for addressing the risk of acute climate disasters. That framework and plans will be submitted this summer to Ministers Blair and Guilbeault by the Disaster Resilience and Security Advisory Table.

The framework comprises the following goals, outcomes and targets:

FLOOD

GOAL: *Reduce extreme weather flood risk* for people living in Canada, by taking proactive, preventive actions that reduce vulnerability and exposure for individuals and communities, and strengthen resilience across Canada.

OUTCOMES: By 2028

- I. **Riverine and Coastal* Risk.** Households in high-risk flood zones** (greater than 1% chance of flooding in any given year) are protected*** through relocation, property and community-based measures
- II. **Urban Risk.** Households in urban and suburban areas**, subject to sudden precipitation as a result of climate-intensified storms, are protected***

TARGETS: By 2028

- Over **35%** of homes** identified as at **high risk** of riverine and coastal* flooding are protected*** by 2028 (there are ~ 840,000 homes designated as high risk – greater than 1% chance of flooding in any given year, per Public Safety Canada, 2022).
- **> 75,000 homes** at risk of urban and suburban flooding** are protected***.

*Includes coastal storms and surges, in combination with king tides. Excludes sea-level rise, which conveys medium to longer-term risk.

** Inclusive of Indigenous and other vulnerable communities.

*** With a material reduction in flood risk.

WILDFIRE

GOAL: **Reduce the risk of adverse wildfire impact** by implementing proven protective actions that reduce vulnerability and exposure for individuals and communities, and strengthen resilience across Canada.

OUTCOMES: By 2028:

- Reduce the number of people displaced by wildfire evacuations, including a reduction in the disruption experienced by First Nations communities through a surge effort in retrofitting construction of residential and priority community buildings in high risk areas.
- Maintain, and seek to eliminate, the low risk of wildfire fatalities and injuries, despite the expected climate-induced increase in area burned
- Prevent a further increase, and seek to reduce, direct wildfire damage to homes, businesses, and public infrastructure, despite climate-induced increase in wildfires

TARGETS: By 2028

- Achieve a displacement rate of the number evacuated due to wildfire to below 50 per 100,000 high risk population annually. Do this by ensuring:
 - All new buildings are wildfire resilient by 2028 per National Guide for Wildland-Urban Interface Fires (NGWUIF) in the National Model Building Code



inclusive | innovative | independent

- Over 50,000 residences and community buildings in high risk areas are retrofitted
- Wildfire fatalities are maintained between 0 and 0.01 per 100,000 population each year
- Direct damage from wildfire less than \$0.05 per \$1,000 of building and content value each year

If you have any questions, please contact me at 604-634-0342 or at email:
anita@businessinsurrey.com.

Sincerely,

A handwritten signature in black ink, appearing to read 'A Huberman', written in a cursive style.

H. Captain (Navy) Anita Huberman
President & CEO, Surrey Board of Trade