

BRIEF: Informed Community Engagement

Strategic Priority: Green and Resilient City

Definition

Enhancing the city's resiliency and capacity for mitigating and adapting to the impacts of climate change. Also, supporting and promoting healthy lifestyles.

Research Shows...

Increasingly, municipalities are linking environmental resilience with community and economic resilience. Sustainable cities encourage more than just climate resilience; they engage in proactive policy development that advances housing affordability, increases access to green spaces, and emphasizes natural and cultural heritage. Attention is also being paid to the notion of environmental justice, which reminds governments that the consequences of a changing climate are not experienced equally, and are disproportionately felt by marginalized and racialized communities. Overall, there is an understanding that a wholistic approach to sustainability, one which considers our shared and distinct vulnerabilities, is required to respond to multiple climate change impacts.

Key Facts and Considerations

- » Between 1948 and 2023, Canada's <u>annual average temperatures</u> have already trended up by 2°C. If this pace continues, we can expect the typical annual average temperature in Canada to rise by another 0.72°C by 2050.
- » Urban heat islands—areas of a city that are hotter due to reduced vegetation and increased paved surfaces—aren't just found in larger cities. Research has shown that small and mid-sized cities are capable of creating urban heat islands as well, with cities such as Inverness, Scotland, and Rennes, France, reaching temperatures several degrees hotter than surrounding areas.
- » The impacts of extreme weather from climate change, like hotter temperatures, have been shown to be <u>unevenly distributed</u>, with mothers and children, outdoor workers and those vulnerable to cardiovascular diseases being more heavily impacted.

¹ Miranda, E., Campbell, L., & Khan, Z. (2023, June 28). How Canada can build the sustainable cities we need for the future. TheFutureEconomy.ca. https://thefutureeconomy.ca/op-eds/sustainable-cities-emily-miranda-wsp-canada/ 2 Waldron, I., & Gue, L. (2024, March 21). Environmental justice in Canada needs legislative backing now. David Suzuki Foundation. https://davidsuzuki.org/expert-article/environmental-justice-in-canada-needs-legislative-backing-now/

- » Owen Sound's Climate Action Strategy is aligned with Grey County's Official Plan on Climate Change, which states, "We can expect that there will be more frequent snow squalls, more extreme rain and flooding events, and warmer summer temperatures. We must take action to adapt to and mitigate the effects of a changing climate."
- » Owen Sound is geographically located within a deep valley where the mouths of the Pottawatomi and Sydenham Rivers meet Georgian Bay. This will have <u>a number of</u> <u>effects</u>, including heightening the risk of riverine and overland flooding and erosion.
- » Community resilience in the face of climate change strengthens the health and well-being of residents, buttresses the local economy and equips everyday citizens with the tools to adapt to, protect themselves from and mitigate the effects of climate change. As well, Owen Sound is exposed to other well-known effects of climate change, such as wetter, warmer winters and hotter, drier summers.

Precedents from Other Communities

The following precedents may be aligned with current initiatives in Owen Sound and may be reviewed to assess local approaches and/or serve as inspiration for possible future initiatives.

- » To reduce greenhouse gas (GHG) emissions to net zero by 2050, the <u>City of Orillia</u> took action by installing greener infrastructure in their city, such as LED street lighting to improve energy consumption efficiency and low-flow technology in water fixtures at city buildings to reduce water consumption. The city will be conducting building condition assessments and GHG audits to monitor progress towards their 2040 net-zero emissions goal for city operations.
- » The City of Brantford's <u>Climate Action Plan</u> emphasizes behavioural changes, such as decreasing single-passenger vehicle usage. The city is working toward this goal through a <u>transit route optimization study</u> to improve service efficiency and encourage more public transit use.
- » The City of Lethbridge's <u>Climate Adaptation Strategy</u> includes actions that will upgrade the power grid to protect against extreme weather and bring additional power sources in the event of a power outage. Additionally, building standards will be raised with climate change in mind to identify ways to weatherproof assets in the event of extreme weather.
- » The City of Kitchener, through Bloomberg Philanthropies' Youth Climate Action Fund, distributed \$50,000 (in US dollars) as microgrants to support <u>youth-led climate initiatives</u> in the city. The grant program was administered in partnership with <u>GreenHouse</u>, a social enterprise incubator run by the University of Waterloo.

To enable residents to thrive in the face of constant climate change-induced flooding, the coastal city of Norfolk, Virginia, encouraged local adaptation via small-scale projects in neighbourhoods prone to flooding. The city sponsored workshops for residents to educate them about water flow, water storage and soil infiltration. Residents were then given the opportunity to lead on the application of mitigating measures, such as the installation of rain barrels, planter systems and green roofs, which enabled them to reduce the surface runoff of water in their neighbourhoods.

Note: This brief is not intended to be complete or exhaustive. It is an informative community engagement preparatory tool. Special thanks to the students of URB432H in the Department of Urban Studies. Instructor: Daniel Fusca

