



Contents

Acknowledgements	vi
1.0 INTRODUCTION AND OVERVIEW	1
1.1 Canada's focus on SDGs	2
1.2. Articulating the SDGs through an urban lens using the UMF	3
2.0 DATA COLLECTION AND RESEARCH METHODS	7
3.0 SUB-NATIONAL OVERVIEWS	11
3.1. Challenges for Canadian cities	12
3.1.1 Access to affordable housing	13
3.1.2 Access to health care	14
3.1.3 Rising costs of food	16
3.1.4 Climate change impacts	16
3.1.5 Inclusion and equity	19
3.1 SDG Cities dashboard	19
3.2 UMF regional overviews	23
4.0 CITY PROFILES	30
4.1 Society	31
Resilient society: CALGARY	31
4.2 Economy	34
Inclusive Economy: OAKVILLE	35
4.3 Environment	38
Inclusive Economy: HALIFAX	39
Inclusive Environment: SAANICH	44
Resilient Environment: GUELPH	48

Sustainable Environment: TORONTO	52
Sustainable Environment: MONTREAL	57
4.4 Culture:	60
Safe and Peaceful Culture: EDMONTON	61
Inclusive Culture: KELOWNA	64
Sustainable Culture: THUNDER BAY	68
4.5 Governance and Implementation:	73
Inclusive Governance and Implementation: KITCHENER	R 74
Inclusive Governance and Implementation: BURLINGT (ON 78
Resilient Governance and Implementation: GIBSONS	82
Sustainable Governance and Implementation: WINNIPI	E G 88
5.0 NETWORK PROFILES	92
5.1 Federation of Canadian Municipalities	93
5.2 ICLEI – Local Governments for Sustainability Canada	94
5. 3 Sustainable Development Solutions Network - Canada	95
5.4 BCIT Centre for Ecocities - Municipal Peer Network	95
REFERENCES	97
APPENDIX A:	
Government of Canada SDG Ambitions Progress	101
APPENDIX B:	
Government of Canada SDG Ambitions Progress and UMF	108
APPENDIX C:	
Global Urban Monitoring Framework (UMF)	121

List of figures

- 1. 17 SDGs
- 2. Focus on SDG 11
- 3. Urban Monitoring Framework
- 4. Canadian SDG Cities Dashboard
- 5. UMF Canada Overview
- 6. UMF Eastern Canada Overview
- 7. UMF Central Canada Overview
- 8. UMF Canadian Prairies Overview
- 9. UMF Western Canada Overview
- 10. UMF Northern Canada Overview

List of acronyms

- **BCIT** British Columbia Institute of Technology
- **CIF** Canadian Indicator Framework
- **FCM** Federation of Canadian Municipalities
- **ICLEI** International Council for Local Environmental Initiatives
- **SDG** Sustainable Development Goal
- UMF Global Urban Monitoring Framework



Acknowledgements

T his report and the work of the **UN-Habitat SDG Cities Global Hub - Canada** is made possible through funding generously provided by Canada Mortgage and Housing Corporation - Partnerships Branch.

It was completed as a project of the **World Urban Pavilion**, located at Regent Park in Toronto, Canada, and co-managed by the Urban Economy Forum and UN-Habitat.

The authors would also like to thank Statistics Canada's Sustainable Development Goals Team for their efforts in implementing the Canadian Indicator Framework and its data hub presenting Canada's progress on the SDGs, both of which were used extensively in this report.

Director

Shipra Narang Suri

Chief, UN-Habitat Urban Practices Branch

Manager of SDG Cities Global Initiative Martino Miraglia

Coordinator, SDG Localisation and Local Governments Unit

Lead Author

Dr. Jennie Moore, Director of Institute Sustainability, British Columbia Institute of Technology

Managing Editor

M.K (Karun) Koernig, SDG Cities Programme Coordinator, Canada

Project managers

Dyfed Aubrey, SDG Cities Global Initiative Coordinator

Douglas Ragan, Co-lead, SDG Cities Global Hub World Urban Pavilion

World Urban Pavilion Team

Minister Ahmed Hussen, Honorary Chair & International Board

Eduardo Lopez Moreno, Co-Director

Alex Venuto, Deputy Director

Research

Ramneek Koonar, Case studies researcher Fredah Cherotich, Canada overview researcher

Statistical data

Xiaomin Gao, City level data researcher **Ester Rugoli,** City level data researcher

Case study scoping

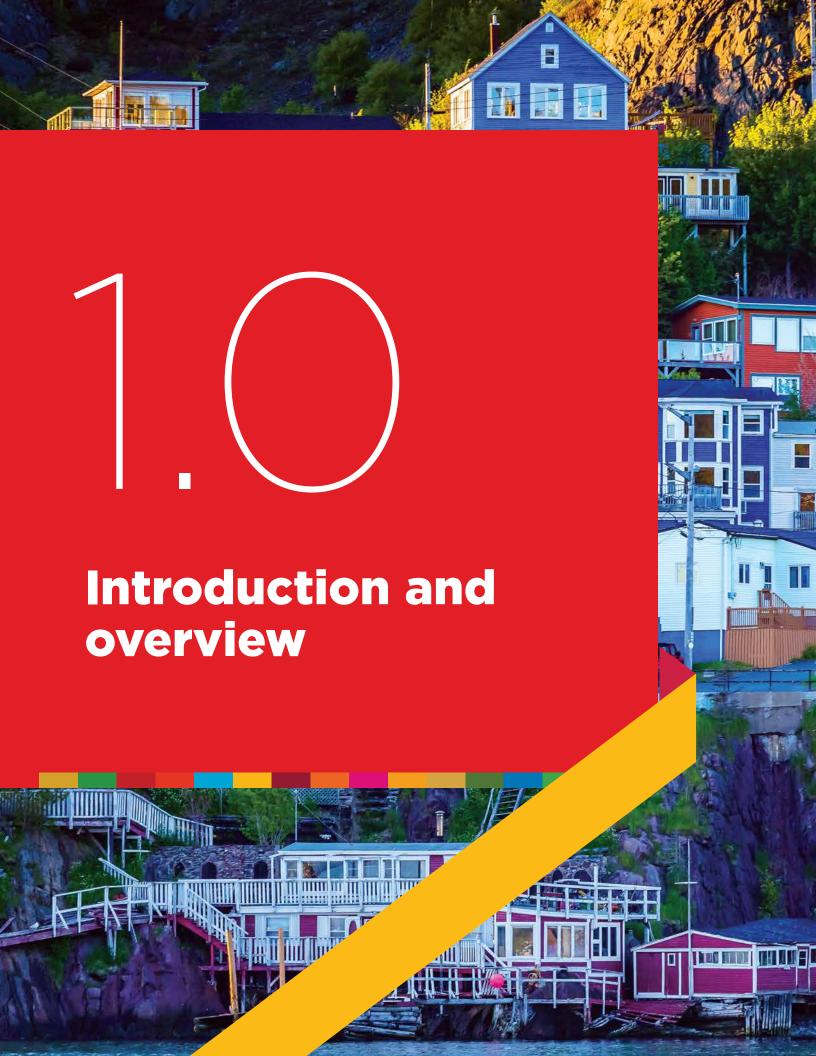
Over 40 students of **Dr. Cherie Enns,** Planning, Environmental Studies and Geography, University of the Fraser Valley

Case studies

Special thanks to the Mayors, Councils, and staff of participating cities featured in the case studies who gave their time and shared their insights about localizing the SDGs at the municipal scale.

Cover design & layout

Tim Kagiri, Graphic Designer **Jessy Mundia,** Graphic Designer



1.0 Introduction and overview

he Government of Canada is committed to upholding the United Nations Sustainable Development Goals (SDGs) and sees municipal governments as key participants in achieving the 2030 Agenda. Local governments in Canada have decision-making responsibilities that directly impact the SDGs, including: land use, housing, transportation, water and waste management. Cities and communities across Canada are on the front lines in terms of engaging with Canadian citizens in whole-ofsociety efforts to advance the SDGs. The Government of Canada supports cities and communities through multiple programmes and initiatives, including access to a total \$59.8 million CAD Sustainable Development Goals Fund (Employment and Social Development Canada, 2023a).

As part of its efforts to advance the 2030 Agenda, the Government of Canada, through the Canada Mortgage and Housing Corporation (CMHC), is

providing funding to support the SDG Cities Global Hub that facilitates efforts by cities seeking pathways to achieve the 17 SDGs. Specifically, CMHC partnered with the Urban Economy Forum and United Nations Human Settlements Programme (UN-Habitat) to establish the World Urban Pavilion, located at Regent Park in Toronto, Canada. The World Urban Pavilion hosts the global hub for UN-Habitat's SDG Cities initiative. Included within this initiative is the tracking and reporting of Canadian urban areas' efforts to achieve the SDGs.

This report provides an overview of how Canadian cities and communities are progressing towards achieving the SDGs, as seen through an urban lens. It uses the Global Urban Monitoring Framework (UMF) designed to help cities track progress. Particular attention is given to how cities are localizing the SDGs through novel and culturally appropriate ways. In this report, innovative approaches that lend themselves to replicability are also emphasized.



66

The **WORLD URBAN PAVILION** is located at Regent Park in Toronto, Canada.

1.1 Canada's focus on SDGs

The 2023 Voluntary National Review evaluates Canada's progress toward achieving all 17 SDGs with particular focus on five goals that align with domestic and international priorities. These are:



(Employment and Social Development Canada, 2023a).

The Government of Canada has created reporting portals to track progress on the SDGs. The Global Indicator Framework (GIF) provides disaggregated data on all 17 SDGs (Statistics Canada, 2021), while the Canadian Indicator Framework (CIF)¹ emphasizes Canada's 31 ambitions, using 76 corresponding indicators (Statistics Canada, 2023a).

Statistics Canada collects, collates, analyses and disseminates data for regular monitoring and progress reporting for both the GIF and CIF, while an SDG Unit within Employment and Social Development Canada leads coordination and implementation of the 2030 Agenda (Employment and Social Development Canada, 2023a).

1.2. Articulating the SDGs through an urban lens using the UMF

The SDGs have proven helpful across a broad spectrum of actors, including at subnational levels. SDG 11 identifies cities and communities specifically, but every goal touches on some aspect of urban lives and livelihoods (Figure 1).

Figure 1. 17 SDGS



Each of the 17 SDGs contain definitions, targets and indicators. This report assumes familiarity with the SDGs. For additional information visit: https://sdgs.un.org/.

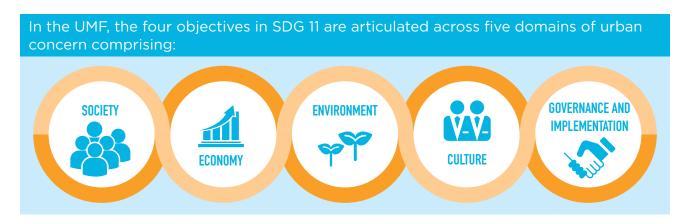
The UMF was developed by UN-Habitat, in collaboration with a host of international agencies, cities, and expert advisors. It was endorsed for global implementation by the United Nations Statistical Commission in March 2022. It enables cities to pinpoint their interests and priorities for achieving the SDGs and the 2030 Agenda.



Figure 2: Focus on SDG 11



1 The CIF was built using the open SDG platform that allows it to be copied and reused by other countries. For additional information for both countries and localities interested in finding ways to report their own SDGs data visit: https://sdgcif-data-canada-oddcic-donnee.github.io/faq/.



In a four by five framework, the UMF captures the spectrum of SDG 11 articulated across 20 intersecting attributes that touch all other SDGs as seen through an urban lens (Figure 3). The UMF also engages additional indicators, such as the UN-Habitat City Prosperity Index (UN-Habitat, 2021a; UN-Habitat, 2019), New Urban Agenda (UN-Habitat, 2021b; UN-Habitat, 2020), UNICEF, OECD and UNESCO Culture 2030 indicators (UNESCO, 2024) to round-out its coverage in the domains of economy and culture, respectively. For a detailed definition of each UMF indicator visit: https://unhabitat.org/the-global-urban-monitoring-framework.

For a full list of all 77 UMF Indicators please see Appendix C.

Figure 3. Urban Monitoring Framework

DOMAINS	CITY OBJECTIVES			
	SAFE & PEACEFUL	INCLUSIVE	RESILIENT	SUSTAINABLE
SOCIETY	Indicators for: Safer Society	Indicators for: Inclusive Society	Indicators for: Resilient Society	Indicators for: Sustainable Society
ECONOMY	Indicators for: Safer Economy	Indicators for: Inclusive Economy	Indicators for: Resilient Economy	Indicators for: Sustainable Economy
ENVIRONMENT	Indicators for: Safer Environment	Indicators for: Inclusive Environment	Indicators for: Resilient Environment	Indicators for: Sustainable Environment
CULTURE	Indicators for: Safer Culture	Indicators for: Inclusive Culture	Indicators for: Resilient Culture	Indicators for: Sustainable Culture
GOVERNANCE AND IMPLEMENTATION	Indicators for: Safer Governance	Indicators for: Inclusive Governance	Indicators for: Resilient Governance	Indicators for: Sustainable Governance

Aligned with Canada's ambitions, this report uses the UMF to track how cities across Canada are progressing towards achieving the SDGs. Section 3 of this report presents an overview of important issues and challenges facing Canadian cities and communities and summarizes a high-level regional overview of their progress. Section 4 profiles specific Canadian cities pursuing innovative solutions. Section 5 explores examples of how city networks are building capacity for accelerated action.





2.0 Data collection and research methods

Data collection for this report relied primarily on data from Statistics
Canada. It was supplemented by a review of literature, including city reports and news reporting services, to explore Canadian city challenges and opportunities. Surveys and field research, comprising interviews with city staff, were used to uncover the ways in which cities are addressing these challenges through efforts to localize the SDGs. Details follow below.

The study year for this report is 2022; however, in cases where study year data is not available, the next most recent year is used, going back as far as 2019 if necessary. For comparative analysis purposes, older data is also reported to establish trend lines for historical context (going as far back as 2015). If data for 2023 is available, it may be referenced for purposes of noting recent trends.

Canada's ambitions, articulated in the CIF, provide the starting point for locating priority indicators in the UMF. Further refinement is then achieved through analysis of which indicators fall within local government spheres of influence, and which also align with the challenges cities are facing. This method of triangulation was pursued in order to produce a uniquely urban focus on selected indicators relevant to Canadian cities and communities. These then serve as the platform to summarize regional progress by cities presented in Section 3.

Statistics Canada has developed a robust and simple method of measuring progress towards the SDGs. It can be reported visually using a colour code to easily see areas of progress or deterioration. Green is used to represent a state of being on-track, yellow indicates progress is being made and acceleration is needed, orange indicates limited progress, and red indicates deterioration (Statistics Canada, 2023i). This report follows a similar approach and, in most cases, reflects the reported indicators and their matching colour code as represented by the Government of Canada. In some instances, for example where the urban experience represents a nuanced difference that results in a departure from national averages, the colour code varies accordingly as a means of signaling this discrepancy. Because the UMF also captures data for indicators outside the SDGs, the use of colour coding represents a best attempt at communicating directional trends for those specific indicators as they apply to Canadian cities and communities.

Cities and communities across Canada are engaged in a broad spectrum of initiatives that touch on almost every aspect of the SDGs. However, in some instances, the way an SDG or UMF indicator is described to measure progress towards a goal may not entirely align with the way it is being pursued at the local level. Because it is important to capture and celebrate local efforts, the UMF makes allowance for localized interpretation and reporting in the spirit of inclusivity. This facility has been utilized in this report, particularly with regard to broadening interpretations of, for example, education for sustainability that happens through informal versus institutionalized environments. Other examples include partnerships that expand access to cultural infrastructure and resources, or grass-roots collaborations that advance

the goals without fund transfer payments. A review of the literature on Canadian cities and their sustainability initiatives informed identification of potential case studies of cities localizing the SDGs in innovative and potentially replicable ways. This included surveys completed by 15 cities through engagement with the SDG Cities Global Hub - Canada, Field research comprising interviews with staff from 13 municipalities across the country, who are working on the front lines to implement these innovative initiatives. further informed the case studies presented in Section 4. Additional review of literature uncovered the important role that networks play in supporting many cities' sustainability efforts. An illustration of organizations providing networking support to cities is presented in Section 5.

For the purposes of this report, urban areas follow Statistics Canada's definitions

for population centres comprising 1,000 or more people living at a density of 400 or more people per square kilometre.

This includes small population centres of under 30,000 people, medium centres under 100,000 people, and large centres of 100,000 or more people. It also encompasses all forms of municipal local government and Indigenous self-governing communities and legal entities. The population centres are distributed by Statistics Canada across six geographical zones comprising Canada's 10 provinces and three territories and are grouped as follows:

- i) Atlantic Canada
- ii) Quebec
- iii) Ontario
- iv) Prairies
- v) British Columbia
- vi) Territories

(Statistics Canada, 2017).





For added clarity "Eastern Canada" is compromised of the Atlantic Provinces New Brunswick, Nova Scotia, Newfoundland and Labrador, and Prince Edward Island. "Prairies" is comprised of the provinces of Manitoba, Saskatchewan, and Alberta. "Territories" is comprised of Nunavut, the Northwest Territories, and Yukon.

The subsequent UMF regional overviews presented in this report conflate the six geographic zones to five and use more general nomenclature as follows:

- i) Eastern Canada (comprising the Atlantic provinces)
- ii) Central Canada (comprising Quebec and Ontario)
- iii) Prairies (comprising Prairie provinces)
- iv) Western Canada (comprising British Columbia)
- V) Northern Canada (comprising the Territories)

The emphasis in Section 3 of this report is on the capital cities and larger population centres, henceforth also referred to as cities, that are distributed across the six geographical zones.² Where available in the statistical data sets, smaller communities are captured and presented in a supplemental data file available upon request. Additional clustering and changes in nomenclature are introduced to facilitate brevity within tables.

Specifically, Quebec and Ontario together are referred to as "Central" and British Columbia is referred to as "Western."

Section 4 attempts to present a broad diversity of cities and smaller communities across Canada, represented by the six geographic zones, to showcase diversity in localizing the SDGs. Efforts were made to be inclusive in representing Canada's diversity both geographically and culturally, specifically seeking engagement with northern, Francophone, and Indigenous communities in the case studies.

Data gaps and limitations of the research include under-representation of Indigenous and northern communities in some of the national statistical data presented in Section 3 and also in the case studies presented in Section 4, where Francophone case studies are also under-represented.

- 2 In heavily urbanized centres, such as the Greater Toronto Area (GTA) or Metro Vancouver, more than 20 municipalities can be clustered together and considered as one urban agglomeration. Whereas capital cities, of which there are 13, plus the national capital, are often, but not always, the largest city in their respective area.
- 3 Please e-mail requests to access the supplemental data file to: sdgcities@un.org.



Despite Canada's vast land area, over 80 per cent of its population lives in cities (Employment and Social Development Canada, 2022a). Although Canada is a developed country, there are discrepancies in the ways people experience development both within cities and across the country (Employment and Social Development Canada, 2022a).

The Government of Canada has prioritized action in the following areas as part of its commitment to implement the 17 SDGs: reducing poverty, building sustainable economic growth, supporting reconciliation with Indigenous peoples, advancing gender equality, and taking action on climate change and clean energy (Employment and Social Development Canada, 2023b). In order to progress this agenda, Canada seeks a "whole-of-society approach" to encourage stakeholders across the country; this includes municipalities that operate at the local level of government, overseen by provincial or territorial jurisdiction (Employment and Social Development Canada, 2022b). As such, understanding how cities are advancing sustainability through localization of the SDGs is an important aspect of achieving Canada's overall strategy. This includes gaining insights into how cities in different regions of the country are progressing towards achieving the SDGs and the 2030 Agenda.

3.1. Challenges for Canadian cities

Despite their general achievements in providing Canadians safe and accessible places to live, work and play, Canadian



ALTHOUGH CANADA is a developed country, there are discrepancies in the ways people experience development both within cities and across the country.

cities also face a number of socioeconomic and ecological challenges. Not withstanding the Government of Canada's interests articulated above, current events making news headlines across the country reveal several important challenges, including:

- ✓ Access to affordable housing
- ✓ Access to health care
- ✓ Rising costs of food
- ✓ Climate change impacts
- ✓ Social inclusion

These challenges are interlinked with the priorities articulated by the Government of Canada and map onto several SDGs that can be tracked through the UMF. For the following section, familiarity with the UMF (elaborated in Appendix C) is assumed. Additional indicators addressed in the UMF that link to the New Urban Agenda, the UN-Habitat City Prosperity Index, UNICEF, and UNESCO Culture 2030 are also relevant for the following analysis.

3.1.1 Access to affordable housing

Access to adequate, safe and affordable housing is represented in the UMF as a sustainable society attribute and is measured by **UMF indicator #23** that corresponds with SDG indicator 11.1.1 Slum population. It measures the proportion of urban population living in slums, informal settlements or inadequate housing.

In Canada, affordable housing is defined as costing less than 30 per cent of beforetax household income (Canada Mortgage and Housing Corporation, 2018).

The Government of Canada aims to ensure that Canadians have access to quality housing and has established a target to reduce chronic homelessness by 50 per cent by 2028 using key indicators that measure: i) the growth rate of people experiencing chronic homelessness, and ii) the proportion of households in core housing need (Employment and Social Development Canada, 2023c).⁴

Approximately 80 per cent of Canadian households are able to secure housing in the market (Canada Mortgage and Housing Corporation, 2018). The proportion of households in core housing need across Canada was 10 per cent in 2021, down 2.6 per cent since 2016. However, this average masks acute and growing needs in some cities and regions. Western and Northern Canada had higher rates at 13 per cent, with the exception of Nunavut at over 30 per cent (Statistics Canada, 2022a).



Aligned with SDG 11, Target 11.1 Access to adequate, safe and affordable housing is a growing concern for some cities, despite national statistics pointing to general improvements. Between one-fifth and one-third of households across Canada pay more than 30 per cent of their income towards shelter costs, reaching as high as two-fifths, or 40 per cent, in some of Canada's largest cities

(Statistics Canada, 2022b). Based on a recent National Bank of Canada survey comparing median housing costs to median household income, only cities in Quebec and the Prairies met the 30 per cent of pre-tax income benchmark for affordability of adequate housing (Dahms & Ducharme, 2023).



3.1.2 Access to health care:

Access to quality, essential health care services and service providers is aligned with SDG 3: Good Health and Well-being, SDG 3.c.1: Health worker density and distribution, and SDG 3.8.1: Access to quality essential health care services. While these indicators are not directly captured in the UMF, they could be represented through UMF attributes addressing a safe and peaceful society, an inclusive society, or resilient society. For the safe and peaceful society attribute, a viable proxy indicator includes **UMF indicator #1,** corresponding with SDG 3.2.1 Under five mortality rate. For the inclusive society attribute, a viable proxy indicator includes **UMF indicator #14**, corresponding with UNICEF #9 Proportion of vaccinated children. In the resilient society attribute, viable proxy indicators include **UMF indicator #17**, corresponding with City Prosperity Index (CPI) Life expectancy at birth,

or **UMF indicator #18**, corresponding with SDG 3.4.1 Mortality rate from non-communicable diseases.

While Canadians continue to achieve high health outcomes according to these indicators, the challenge of access to health care services, and service providers in particular, can be viewed as an emerging issue that may warrant future tracking. For purposes

of this report, this challenge is being reported under the inclusive society attribute in light of the goal for universal coverage and recognizing that inequalities in health care coverage remain (Employment and Social Development Canada, 2023d).

In Canada, universal health coverage includes reasonable access to medically necessary hospital and physician services without financial or other barriers (Health Canada, 2019).

The Government of Canada aims to ensure that Canadians have access to universal health care, including coverage of costs for and access to essential health services defined as reproductive, maternal, newborn, childhood, infectious and non-communicable diseases (Employment and Social Development Canada, 2023d). Despite a long history of excellent health care provision in Canada, service capacity and access for both the general population and the most disadvantaged groups have come under increasing strain. This issue was



UNIVERSAL HEALTH
COVERAGE INCLUDES
REASONABLE ACCESS
TO MEDICALLY
NECESSARY HOSPITAL
AND PHYSICIAN
SERVICES WITHOUT
BARRIERS.

most pronounced in rural and northern communities; however, it is also becoming a challenge in several cities, particularly in Quebec, Saskatchewan, and British Columbia. In 2020, approximately 80 per cent of Canadians had access to primary healthcare service providers, dropping from a high of 85.5 per cent in 2019 (Duong & Vogel, 2023) (Statistics Canada, 2020).

Opioid- and stimulant-related deaths are represented in the UMF as a resilient society attribute that is measured by **UMF indicator #21**, corresponding with SDG 3.4.2 Suicide mortality rate.

Compounding challenges with access to health care is the rise in opioid and stimulant related deaths. The Government of Canada aims to prevent causes of premature death with a target of reducing from the previous year the incidence of opioid and stimulant related overdose related harms (Statistics Canada, 2023b).

Overdose deaths jumped 85 per cent from 2018 to 2021, reaching a rate of 21 deaths per 100,000 population across the country (Employment and Social Development Canada, 2023a). However, in 2022, this number dropped to a rate of 18.8 per cent per 100,000 with a marked reduction seen in Manitoba, as well as more modest reductions in Prince Edward Island and the Northwest Territories (Statistics Canada, 2023c).

3.1.3 Rising costs of food

Access to affordable food is represented as a resilient society attribute in the UMF. It is measured by **UMF indicator #22** that is aligned with SDG 2 Zero hunger and indicator SDG 2.1.2 Food insecurity.

In Canada, moderate to severe food insecurity involves a compromise in the quality or quantity of food consumed, including missed meals that can span several days (Caron & Plunkett-Latimer, 2022). Marginal food insecurity refers to a situation in which at least one of the above elements is present resulting from income-related difficulties with food access (Statistics Canada, 2023d).

The Government of Canada aims to ensure that Canadians have access to sufficient, affordable and nutritious food (Statistics Canada, 2023e).

Moderate to severe food insecurity increased from 11 per cent in 2019 to 13 per cent in 2021 (Statistics Canada, 2023d). Cities in Atlantic, Prairies, and Northern Canada were most severely impacted. Marginalized groups including—singleheaded households, Indigenous peoples, and new immigrants— also experienced higher incidents of food insecurity at 30 per cent, 20 per cent, and 17.5 per cent respectively (Caron & Plunkett-Latimer, 2022). Food Banks Canada also reports increasing usage, with overall visits up 32 per cent between 2022 and 2023, and 78.5 per cent since 2019 (Food Banks Canada, 2023). A combination of factors driving this increase were cited including high food costs, high housing costs, low wages, or not enough hours of paid work (Food Banks Canada, 2023).



3.1.4 Climate change impacts

Greenhouse gas (GHG) emissions reductions are represented in the UMF by the sustainable environment attribute and measured by **UMF indicator #50** Greenhouse gas emissions per year per capita.

As a Northern Hemisphere country, Canada is already facing significant warming, at twice the global average rate, with some years seeing temperatures exceeding the global climate stabilization target of 1.5 degree Celsius above historic levels (Environment and Climate Change Canada, 2023). Canada is also a major contributor to global greenhouse gas emissions,



(Employment and Social Development Canada, 2022a). As a predominantly urbanized population, municipal governments in Canada also affect up to 50 per cent of the country's GHG emissions (National Climate Change Secretariat (Canada) Municipalities Table., 2013).

The Government of Canada aims to have Canadians reduce their GHG emissions with a target of 40-45 per cent reductions in Canada's total emissions relative to 2005 levels by 2030, and achieving economy-wide net-zero by 2050 (Statistics Canada, 2023f). Cities can help reduce GHG emissions

through both their corporate operations as municipal service providers of a range of utility services, (e.g., drinking water and waste disposal), as well as through zoning to support efficient land use and a built environment that is amenable to active and public transportation choices. Building performance and nature-based solutions to support green infrastructure services are also becoming important. This wide range of avenues for action touch on multiple SDGs that are expressed through the UMF.

The UMF also includes a number of indicators that reflect the integral role cities play in shaping the urban GHG emissions profile. These are represented in the UMF by the:

- Safe and peaceful environment attribute, measured by UMF indicator #41 Solid waste collection and disposal;
- Inclusive society attribute, measured by UMF indicator #10 Access to public transit;
- Inclusive economy attribute, measured by UMF indicator #29 Use of public transport;
- Resilient environment
 attribute, measured by UMF
 indicator #46 Renewable
 energy share, UMF indicator
 #47 Green area per capita,
 and UMF indicator #48
 Change in tree cover;
- Sustainable environment attribute, measured by UMF indicator #51 Efficient land use.

The Government of Canada also aims to ensure that Canadians are well-equipped and resilient in the face of the effects of climate change (Statistics Canada, 2023f). The frequency and scope of climate change impacts is affecting cities across the country, including intense storms, floods, wildfires, and heat-domes. These, in turn, also affect urban infrastructure and resources. For example, longer, hotter summers can impact drinking water reservoir supplies.

Cities across Canada are on the frontlines of climate change impacts and are investing in climate mitigation and adaptation strategies, represented in the UMF as a sustainable environment attribute by **UMF indicator #52** that aligns with the New Urban Agenda 50 indicator addressing Budget for climate change mitigation and adaptation.

Despite a slight decrease in average household water consumption from 3.13 million cubic metres in 2015 to 2.99 million cubic metres in 2019, there has been an increasing number of municipal water advisories across the country (Statistics Canada, 2023g). The percentage of Canadian municipalities with sustained drinking water advisories, lasting 15 or more days, is increasing, with Atlantic Canada and to a lesser extent Central Canada being most affected (Statistics Canada, 2023h).

Safely managed drinking water services is represented in the UMF as a safe and peaceful society attribute, measured by **UMF indicator #2** and corresponds with SDG 6.1.1 Proportion of population using safely managed drinking water services. Although not specifically addressed in the UMF, SDG 6.6.1 Change in the extent of water related ecosystems over time represents a complementary indicator. Other UMF indicators affected by climate change impacts include **UMF indicator #20** Population affected by hazardous events, which is represented by the UMF resilient society attribute.



3.1.5 Inclusion and equity

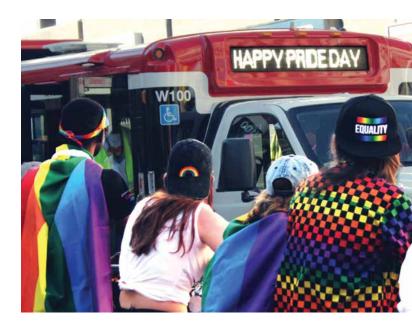
Represented by the safe and peaceful culture attribute in the Urban Monitoring Framework and measured by **UMF indicator #53** Social cohesion, this indicator aligns with the Culture 2030 UNESCO 18 indicator of the same name. It measures intercultural tolerance, reported feelings that people can be trusted, and positive assessments of gender equity (UN-Habitat, 2022). This indicator also more generally aligns with SDG 10 Reduced inequalities (UN Department of Economic and Social Affairs, 2024).

In Canada, it includes measures of intentional representation of underrepresented groups in policies, for example inclusive categorizations for all individuals, and access by marginalized individuals to general resources, this also includes measuring the proportion of the population reporting discrimination or unfair treatment, including hate crimes (Statistics Canada, 2023j).

Canada has a mixed history regarding inclusion and equity; however, its importance is recognized as essential to achieving sustainability (Privy Council Office, 2021).

Canada's ambition is to reduce inequalities and ensure Canadians live free of discrimination (Employment and Social Development Canada, 2023e).

Canada adopted the United Nations Declaration on the Rights of Indigenous Peoples Act in 2021 and is pursuing a Truth and Reconciliation process to address harms and inequities inflicted upon Canada's Indigenous Peoples. Indigenous Services Canada has adopted a plan to advance Indigenous interests aligned with the SDGs (Indigenous Services Canada, 2023).



Even as the country moves forward with efforts to promote social inclusion and advance the interest of equity-deserving groups, some cities are experiencing increasing incidences of hate crimes and socio-economic polarization. For example, hate crimes are on the rise across the country with cities in British Columbia, Ontario, Nova Scotia, and Prince Edward Island particularly affected (Statistics Canada, 2023j).

3.1 SDG Cities dashboard

On the whole, Canadian cities continue to provide safe and accessible places for people to learn, work and live dignified lives. Nevertheless, some challenges confront cities more acutely than for the country as a whole. Moreover, different challenges affect different regions with varying intensity. For this analysis, cities have been grouped into five Canadian regions: "Eastern" for cities located in the Atlantic Provinces comprising New Brunswick, Nova Scotia, Newfoundland and Labrador, and Prince Edward

Island; "Central" for cities located in Quebec and Ontario; "Prairies", for cities located in Manitoba, Saskatchewan, and Alberta; "Western" for cities located in British Columbia; and "Northern" for cities located in Nunavut, Northwest Territories, and Yukon.

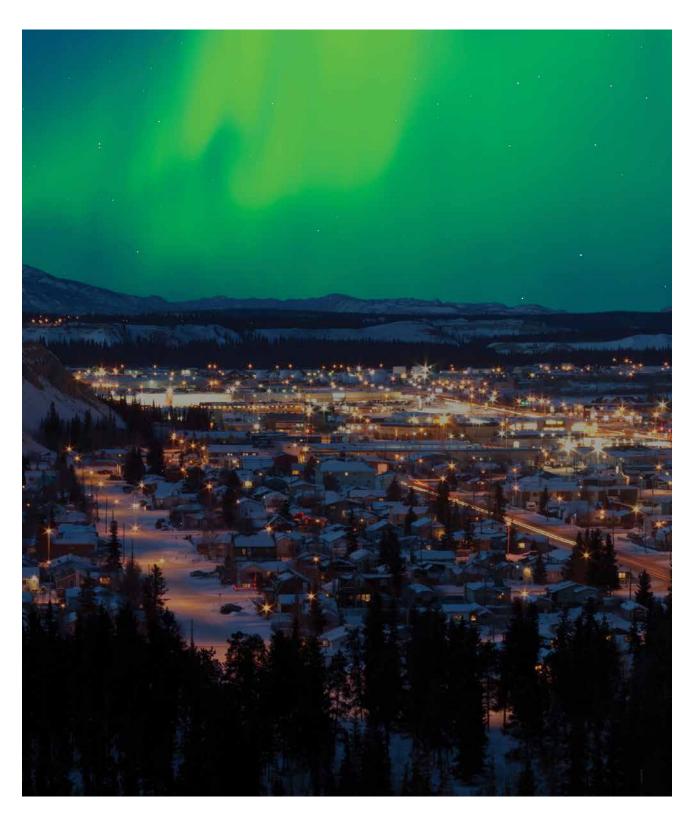
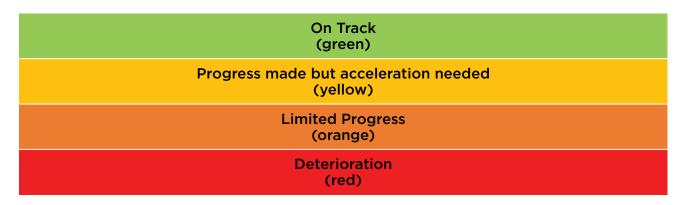


Figure 4 summarizes at a glance how Canadian cities are progressing towards the SDGs.

The colours represent the degree to which that indicator is progressing or deteriorating.

Legend for colour coding



Data is taken predominantly from the Canadian Indicator Framework (CIF). See Appendix A for additional information details and source references.

Figure 4. Canadian SDG Cities Dashboard

SDG	Status	Comments
1 MD POVERTY		Poverty rates are declining, exceeding 50% reductions since 2015 by all cities across the country. Cities in Central and Western Canada are achieving the most significant drops.
2 ZERO HUNGER		Food insecurity is increasing, particularly for cities in Atlantic, Prairies and Northern Canada.
3 GOOD HEALTH AND WELL-BEING		Access to primary health-care providers remains uneven and is dropping from 85 to 80 per cent coverage, with most affected cities located in Northern, Central, Prairies and Western Canada.
4 QUALITY EDUCATION		Education rates are increasing and 63 per cent of Canada's working age population has attained post-secondary education.

5 GENDER EQUALITY	The percentage of women in leadership roles across private and public sectors remains under-represented, with the exception of federal cabinet ministers and judges in federal courts.
6 CLEAN WATER AND SANITATION	Water advisories on reserves south of the 60th parallel are decreasing; however, the percentage of municipalities with sustained drinking water advisories is increasing, with Atlantic and Central Canada most affected.
7 AFFORDABLE AND CLEAN ENERGY	Despite a slow transition to clean energy, efficiency is improving and total consumption is reducing. Cities in Northern Canada are achieving the greatest per capita energy consumption reductions.
8 DECENT WORK AND ECONOMIC GROWTH	Unemployment rates are reducing. With the exception of cities in the Prairies, earnings relative to permanent, full-time median wages are improving.
9 MOUSTRY, INNOVATION AND INFRASTRUCTURE	Greenhouse gas emissions per dollar of infrastructure investment is decreasing. Cities are achieving over 98 per cent broadband and mobile wireless telecommunications coverage.
10 REQUALITIES	Hate crime is increasing across Canada with cities in Western Canada seeing a significant rise along with some cities in Central and Eastern Canada.
11 SUSTAINABLE CITIES AND COMMUNITIES	Some of Canada's largest cities are in a housing crisis. Only cities in Quebec and the Prairies meet the affordability criteria of 30 per cent net household income spent on securing adequate housing to meet needs.
12 RESPONSIBLE CONSUMPTION AND PRODUCTION	Canadian cities are seeing acceleration towards the adoption of electric vehicles, but adoption of business environmental practices and total waste diversion per capita remain stagnant.
13 CLIMATE ACTION	Cities in Central and Western Canada are reducing greenhouse gas emissions while some cities in the Prairies are increasing. Overall, there has been an 8.5 per cent reduction in emissions below 2005 levels.
14 LIFE BELOW WATER	Many cities are investing in protecting and rehabilitating freshwater and coastal ecosystems. Protected areas are increasing dramatically across Canada and sustainable fisheries management has made modest gains.

15 UFE ON LAND	Many cities are combining compact development plans with protected natural areas strategies. Despite these efforts, some species are in decline including amphibians, birds, moths and butterflies, and reptiles.
16 PEACE, JUSTICE AND STRONG INSTITUTIONS	Despite confidence in rule of law and effective justice institutions, Canadians report feeling less safe. Incidents of violent crime are on the rise in some cities in Atlantic, Prairies, Western and Northern Canada.
17 PARTNERSHIPS FOR THE GOALS	Most Canadian cities are embedding sustainability in their operations and Official Community Plans, participating in networks to leverage their capacity, and working with private sector and civil society organizations.

3.2 UMF regional overviews

The Global Urban Monitoring Framework (UMF) facilitates exploring the SDGs through an urban lens. The following UMF regional overviews, illustrated in Figures 5 through 10, provide a more nuanced perspective of the regionally differentiated progress cities are making in advancing the 2030 Agenda. For consistency the status of the selected UMF indicators is shown using the same colour coding system as on page 21. To further localize the assessment, this analysis adopts the indicator terminology used in Section 3.1 "Challenges for Canadian Cities" which in some cases replaces the standard language of UMF attributes.

This exercise illustrates the flexibility of the UMF to support local interpretation and adaptation of data monitoring according to local circumstances. It also demonstrates the capacity of the Urban Monitoring Framework to capture and summarize progress across different geographies and broad array of issues. In cases where more than one indicator is being tracked within a UMF attribute, an attempt has been made to represent the average colour coding. While this results in some loss of nuance in the overviews, readers can find more detailed information in the tables in Appendix B.

Note on availability of Canadian City Level Data

Canadian city level data on the indicators within the Urban Monitoring Framework is not uniformly available for all the selected indicators in this report. There are temporal data gaps as well as gaps in disaggregation from a provincial to municipal level. The following regional summaries are based on best available data. Researchers and other interested users of this report can request the raw data at the level it was available by contacting UN-Habitat at *sdgcities@un.org* or on the website at *https://www.sdg-cities.org/*

Legend for colour coding

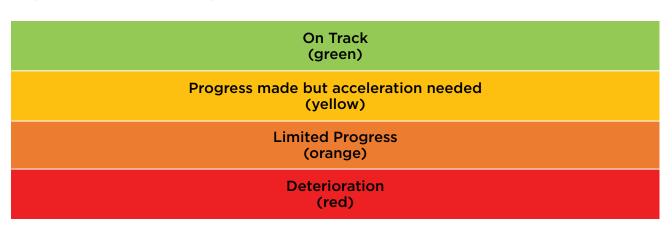


Figure 5. CANADA OVERVIEW - Status of localized UMF indicators

City Objectives				
Domains	Safe and Peaceful	Inclusive	Resilient	Sustainable
Society	Sustainably managed water and sanitation	Accessible primary health-care provider coverage	Food insecurity Opioid overdose Hazardous events	Affordable adequate housing
Economy	Avoid child labour Unpaid domestic labour	Employment Public transit Internet use	Attain formal education and training	Mean income Sub national debt
Environment	Good air quality Waste management	Open space Sustainable education	Renewable energy Tree cover	Reduce GHG emissions Efficient land use
Culture	Social inclusion Cultural knowledge	Access to cultural infrastructure	Heritage preservation	Climate adaptation and resilience
Governance and Implementation	Reduce victims of violence	Civil society participation	Local disaster risk reduction	Urban policies and plans

Figure 6. EASTERN CANADA - Status of localized UMF indicators

City Objectives				
Domains	Safe and Peaceful	Inclusive	Resilient	Sustainable
Society	Sustainably managed water and sanitation	Accessible primary health-care provider coverage	Food insecurity Opioid overdose Hazardous event	Affordable and adequate housing for all
Economy	Avoid child labour Unpaid domestic labour	Employment Public transit Internet use	Attain formal education and training	Mean income Sub national debt
Environment	Good air quality Waste management	Open space Sustainable education	Renewable energy Tree cover	GHG emissions Efficient land use
Culture	Social inclusion Cultural knowledge	Access to cultural infrastructure	Heritage preservation	Climate adaptation and resilience
Governance and implementation	Reduce victims of violence	Civil society participation	Local disaster risk reduction	Urban policies and plans

Figure 7. CENTRAL CANADA - Status of localized UMF indicators

City Objectives					
Domains	Safe and Peaceful	Inclusive	Resilient	Sustainable	
Society	Sustainably managed water and sanitation	Accessible primary health-care provider coverage	Food insecurity Opioid overdose Hazardous event	Affordable Adequate Housing	
Economy	Avoid child labour Unpaid domestic labour	Employment Public transit Internet use	Attain formal education and training	Mean income Sub national debt	
Environment	Good air quality Waste management	Open space Sustainable education	Renewable energy Tree cover	GHG emissions Efficient land use	
Culture	Social inclusion Cultural knowledge	Access to cultural infrastructure	Heritage preservation	Climate adaptation and resilience	
Governance and implementation	Reduce victims of violence	Civil society participation	Local disaster risk reduction	Urban policies and plans	

Figure 8. CANADIAN PRAIRIES - Status of localized UMF indicators

City Objectives				
Domains	Safe and Peaceful	Inclusive	Resilient	Sustainable
Society	Sustainably managed water and sanitation	Accessible primary health- care provider coverage	Food insecurity Opioid overdose Hazardous event	Affordable adequate housing
Economy	Avoid child labour Unpaid domestic labour	Employment Public transit Internet use	Attain formal education and training	Mean income Sub national debt
Environment	Good air quality Waste management	Open space Sustainable education	Renewable energy Tree cover	GHG emissions Efficient land use
Culture	Social inclusion Cultural knowledge	Access to cultural infrastructure	Heritage preservation	Climate adaptation and resilience
Governance and implementation	Reduce victims of violence	Civil society participation	Local disaster risk reduction	Urban policies and plans

Figure 9. WESTERN CANADA - Status of localized UMF indicators

City Objectives				
Domains	Safe and Peaceful	Inclusive	Resilient	Sustainable
Society	Sustainably managed water and sanitation	Accessible primary health-care provider coverage	Food insecurity Opioid overdose Hazardous event	Affordable adequate housing
Economy	Avoid child labour Unpaid domestic labour	Employment Public transit Internet use	Attain formal education and training	Mean income Sub national debt
Environment	Good air quality Waste management	Open space Sustainable education	Renewable energy Tree cover	GHG emissions Efficient land use
Culture	Social inclusion Cultural knowledge	Access to cultural infrastructure	Heritage preservation	Climate adaptation and resilience
Governance and implementation	Reduce victims of violence	Civil society participation	Local disaster risk reduction	Urban policies and plans

Figure 10. NORTHERN CANADA - Status of localized UMF indicators

City Objectives				
Domains	Safe and Peaceful	Inclusive	Resilient	Sustainable
Society	Sustainably managed water and sanitation	Accessible primary health-care provider coverage	Food insecurity Opioid overdose Hazardous event	Affordable adequate housing
Economy	Avoid child labour Unpaid domestic labour	Employment Public transit Internet use	Attain formal education and training	Mean income Sub national debt
Environment	Good air quality Waste management	Open space Sustainable education	Renewable energy Tree cover	GHG emissions Efficient land use
Culture	Social inclusion Cultural knowledge	Access to cultural infrastructure	Heritage preservation	Climate adaptation and resilience
Governance and implementation	Reduce victims of violence	Civil society participation	Local disaster risk reduction	Urban policies and plans

Canadian cities are actively engaged in achieving the SDGs and specifically advancing UMF objectives. This section highlights innovative examples of city efforts across the various UMF domains. Particular attention is given to city efforts aimed at addressing the challenge areas for Canadian cities addressed in Section 3 above.

It is important to note that there are many more cities engaged in advancing sustainability in Canada than can be covered in this report. Furthermore, for every city initiative profiled in the report, there are numerous other initiatives from that city that could also be featured to demonstrate exemplary action on the Sustainable Development Goals (SDGs). Due to space constraints, only one case study was chosen per city. The selection process aimed to cover a wide range of examples for localizing the SDGs across the UMF, considering a variety of urban sustainability factors and geographic areas.







4.1 Society

Resilient society

CITY OF CALGARY

2 ZERO HUNGER	Name of City: City of Calgary
<u> </u>	Name of Initiative: Food Resilience Program
UMF Attribute:	Global Urban Monitoring Framework (UMF) Indicator:
Resilient Society	1.3.6 Food Insecurity
	#22 Prevalence of moderate or severe food insecurity in the population

SDG Target 2.1: End hunger and ensure access by all people, including the vulnerable to safe, nutritious and sufficient food all year round.

SDG Target 2.4: Ensure sustainable food production systems and implement resilient agricultural practices, increasing productivity and production to maintain ecosystems and adapt to climate change.



Summary:

This strategic planning program assesses the City's food system and will create recommendations to ensure its resilience in the face of future shocks and longer-term stressors. The purpose of the program is to ensure there is a well-functioning food system where food is available on a consistent basis, is physically and economically assessable, and is culturally and nutritionally acceptable in quality to all Calgarians. It focuses on promoting local products, securing a consistent supply of nutritious food that is environmentally sustainable, and preparing the City for natural and human-caused disasters on a local and global scale. For example, the program will prepare Calgary's food production and distribution to respond to: climate change, increasing energy prices, growing populations, urbanization, geopolitical disturbances, and other crises with the potential to affect the food system and its supply. In the planning and implementation stages, the City will consider the entire scope of the full food system with a focus on implementation actions that strengthen the local and regional food system, including food production, processing, distribution, access, consumption habits, food waste recovery, as well as hazards and potential vulnerabilities that could lead to food disruption.

Through this program, Calgary is addressing SDG Target 2.1 to ensure access to food for all, and Target 2.4 ensuring sustainable food production systems. It is also addressing the Urban Monitoring Framework (UMF) indicator measuring the prevalence of food insecurity.

Factors contributing to its creation:

Through community efforts, City Council endorsed *Calgary Eats in 2012* which became the enabling policy legislation for the Food Resilience Program. The impetus for the program was the staff observation that of the 17 actions in the Calgary Eats mandate, there was limited focus on resilience. When the City's Climate Plan was in its development stages, it included policy direction on a sustainable food system, but that lacked a pivotal focus on resilience. The City then created seven resiliency strategies, *with one specifically to develop a resilient food plan.* This was also inspired by the emerging data on climate and population trends. Another factor was Calgary's membership in *100 Resilient Cities*, which illustrated for staff and leadership that a resilient food plan was a priority. Prior to the Covid-19 pandemic, food access and food sustainability were not seen as part of local government's purview, which traditionally focuses on core services. The pandemic evidently led to food shortages and now, even after the pandemic, there has not been a full recovery in supply. Thus, this issue is now viewed as an ongoing priority.

Resource requirements for implementation:

The program has completed its 'strategy development' phase and is now engaging community. It is now funded at 3.0 staff positions with additional cross-corporate resources as other City departments must be involved with the implementation process. The City would benefit from and value funding to conduct a food flow analysis, similar to what the City of Vancouver has done. Calgary is the first city to utilize *Johns Hopkins' Food System Resilience* guide to developing a food resilient strategy that provides guided inquiry, spreadsheets, and a useful toolkit to further mobilize the plan.

What is working well:

The combination of motivated staff and fortuitous timing were instrumental. The initiative began in 2019, pre-COVID; however, during the pandemic the impacts of food scarcity became overwhelmingly apparent, and the post-pandemic leadership understood the need for making it much easier to move forward.

What is needed to make further progress:

Through the strategy development, foundational actions (core actions needed to develop other pieces of work), connected actions (actions connected to other ongoing cross-corporate policy development), and emergent actions (actions that are in anticipation or response to an expected event) have been identified and will be given priority in implementation. However, since 2016, policy alignment has been increasing under the Calgary Eats Plan. Food resilience is not only a municipal issue, other levels of government also need to get involved. Due to the private sector controlling the food system, there is limited scope for government action. The City will be consulting with private and not-for-profit groups. The City's staff see a need for a multi-scaler response across provincial and federal levels. For example, it must be understood how the National Food Policy translates down to the municipal level.

How progress is being tracked:

The City is currently developing their own measurement indicators. They may use the *Milan Urban Food Policy Pact* with several different indicators. The Food Action Plan measures "food system assets," emulating Vancouver's use of urban farms and food hubs.

Advice to cities seeking to replicate this initiative:

Political buy-in is absolutely essential and assists with locating the necessary resources. The City recommend using *John Hopkins A Planning Guide for Local Government*. It also engaged post-secondary institutions for research and scanning. From their experience, a crisis shifts the context radically and quickly and allows solutions to become self-evident.

Further information:

https://pub-calgary.escribemeetings.com/filestream.ashx?DocumentId=206248

https://resilientcitiesnetwork.org/six-things-the-city-of-calgary-is-doing-to-build-a-more-resilient-food-system/

https://clf.jhsph.edu/publications/food-system-resilience-planning-guide-local-governments

https://www.calgary.ca/major-projects/food-action-plan.html#:~:text=The%20Food%20 Resilience%20Plan%20will,to%20a%20food%20system%20disruption

https://www.calgary.ca/content/dam/www/pda/pd/documents/calgary-land-use-bylaw-1p2007/calgaryeats--full-food-system-assessment--action-plan-for-calgary-may2012.pdf



4.2 Economy

Inclusive Economy

TOWN OF OAKVILLE

11 SUSTAINABLE CITIES AND COMMUNITIES	Name of City: Town of Oakville
	Name of Initiative: Youth and Seniors Ride Transit Free
UMF Attribute: Inclusive Economy	Global Urban Monitoring Framework (UMF) Indicator:
	2.2.3 Use of Public Transport
	#29 Proportion of trips made in public transport.

CPI Infrastructure - Urban Mobility: In order to achieve safer, more affordable, accessible and sustainable mobility in urban areas, a dual approach based on the improvement of public transit systems and the encouragement of non-motorized modes like walking and cycling and public transit system should be encouraged.

SDG Target 11.2: By 2030, provide access to safe, affordable, accessible, and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons.



Summary:

The City of Oakville is making transit more accessible by providing *free rides to youth and seniors everyday, at any time*. In line with the City's commitment to sustainability, it's provision of free transit aims at reducing automobile trips and associated greenhouse gas emissions. Oakville's program is implemented through the age-tested distribution of a limited quantity of free "Presto cards", a transit pass granting free access to the entire public transit system. Presto cards are valid for transit use in surrounding cities which offers children and youth enhanced inter-urban connectivity.

Oakville's efforts align with SDG Target 11.2 addressing sustainable transportation for all, as well as the Urban Monitoring Framework (UMF) indicator measuring use of public transport.

Factors contributing to its creation:

City staff believe that multiple factors contributed to the successful implementation of the free fares program. The most prominent factor was an impetus from the City to significantly increase transit ridership in an auto-dependent suburb. Its primary strategy was to engage youth at an early age to create familiarity with public transport and City services. An important factor initiating the development of this project was the significant post-pandemic drop in ridership levels. At first, free transit was limited to seniors only and only on Mondays. This was well received and highly used by seniors, which encouraged the City to extend the program to cover the whole week. The program was rolled out in phases and initially included seniors 65 years and over. Previously transit had already been free for children 0-12 years of age, but a further phase extended that to youth up to 19 years old.

Resource requirements for implementation:

A key requirement for success of the program was determining the tax levy that could compensate for lost fare revenues from the distribution of free Presto cards, as well as cover the additional operating costs related to increasing ridership. Lost fare revenue was computed using the difference between increased post program ridership and anticipated baseline ridership. The other half of the equation were the increased operating costs related to higher rider demand. The first challenge was anticipating the increased operational demand should the program become very popular. Initially increased ridership was accommodated with spare capacity in the existing bus fleet. Eventually, however, the City had to organize extra buses to accommodate school start and end times (rush hour ridership). Actual and anticipated additional operational costs as well as imputed lost fare revenue were added into the equation for a levy that was incorporated into the City's regular annual tax line.

What is working well:

Once the decision was made to run the program, Council and City staff quickly got on board. Staff noted that the program took a lot of planning up front. Using the existing bus capacity is working well; however, they do foresee a potential challenge of increasing ridership outstripping their projected demand for buses. Nevertheless, the City views this eventuality as a 'win' from a sustainability perspective.

What is needed to make further progress:

The City sees 'travel training' for rider education regarding how to use the transit system as an absolute necessity. For example, it would be helpful to have a campaign educating users on the Presto monthly pass system. Current resource constraints have hindered the implementation of a wide scale-travel training program.

How progress is being tracked:

Progress is being tracked through ridership numbers with demographics and usage easily tracked on Presto cards. For example, senior ridership passed 100% in June 2023 (with double ridership), and youth ridership was up 86%. Another metric is the increased number of buses needed to accommodate ridership demand.

Advice to cities seeking to replicate this initiative:

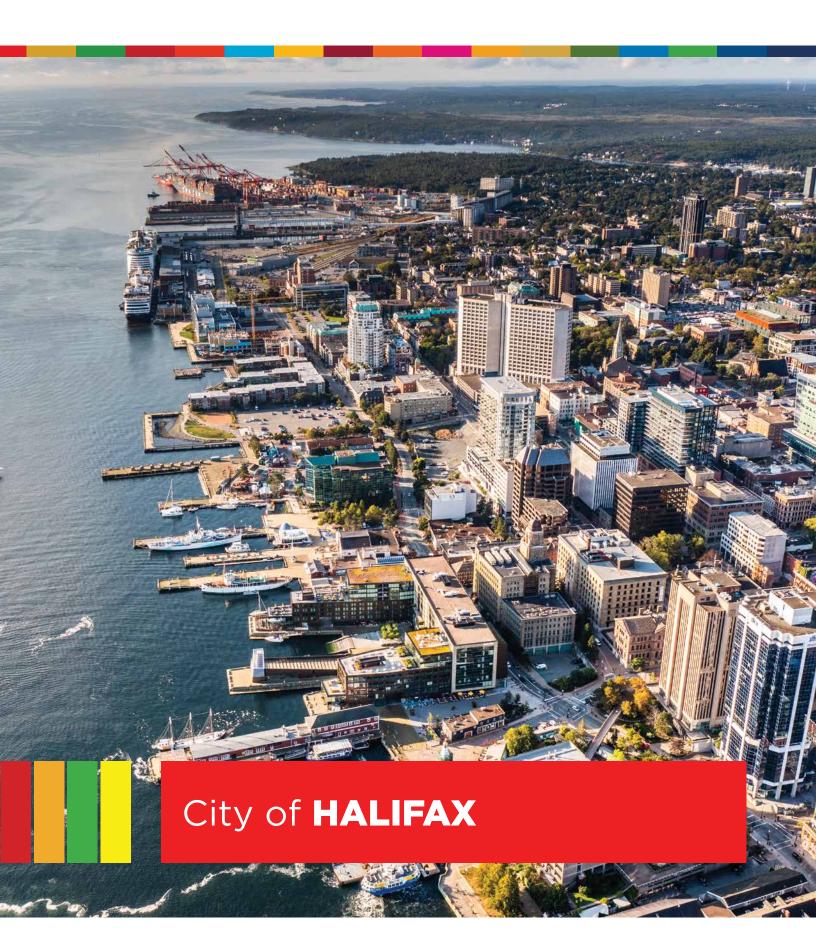
Political buy-in from Council was central to the success of the program. Without their full support, the program might not survive the inevitable hick-ups in the start-up phase. So political support for the distribution of costs and benefits is absolutely needed from the outset. With that, staff can move forward with the financial backing of the levy to cover increased costs. These costs must be understood before embarking. Similarly, understanding is needed regarding questions of capacity, including the question of whether the transit system has enough drivers, or if the increased service levels can be sustained throughout the day or just at peak service times. Communicating effectively amongst stakeholders was also necessary as well as a clearly communicated plan that ensures everyone understands what is happening and their roles.

Further information:

https://www.oakvilletransit.ca/

https://www.oakvilletransit.ca/fares/youth-and-seniors/





CITY OF HALIFAX

8	DECENT WORK AND ECONOMIC GROWTH
	ш

Name of City: Halifax Regional Municipality

Name of Initiative: African Nova Scotian Road to Economic Prosperity Action Plan

UMF Attribute:

Global Urban Monitoring Framework (UMF) Indicator:

Inclusive Economy

2.2.1 Unemployment Rate

#27 The number of unemployed people as a proportion of the total labour force.

CPI Productivity - Employment: CPI conceptualizes a prosperous city as one that fosters economic development, and creates conditions necessary to provide decent jobs and equal opportunities for everyone, by implementing effective economic policies and sector reforms.

SDG Target 8.3: Promote development-oriented policies that support productive activities, decent job creation, entrepreneurship, creativity and innovation, and encourage the formalization and growth of micro-, small- and medium-sized enterprises, including through access to financial services.

SDG Target 10.2: By 2030, empower and promote the social, economic and political inclusion of all, irrespective of age, sex, disability, race, ethnicity, origin, religion or economic or other status



Summary:

The African Nova Scotian Road to Economic Prosperity Action Plan, developed by the African Nova Scotian (ANS) community in collaboration with Halifax Partnership and other stakeholders, represents a significant stride towards addressing long-standing economic disparities and systemic barriers faced by African Nova Scotians.

Launched in January 2021, this five-year initiative is pivotal for its community-driven approach to economic development, aiming to foster an inclusive, diverse, and equitable economic landscape in Halifax.

One of the most interesting aspects of the plan is its focus on three strategic priorities: building unity and capacity among ANS communities, establishing land ownership and developing infrastructure to attract investment, and enhancing participation in education, employment, and entrepreneurship. These priorities not only target the immediate economic empowerment of the ANS community, they also lay a foundation for sustained prosperity. The initiative underscores a holistic approach, emphasizing the importance of community unity, the critical role of land ownership for economic autonomy, and the need to increase opportunities for education and entrepreneurship as pathways to economic development.

The Action Plan has garnered support from both the municipal and provincial governments, as well as private sector partners like Royal Bank of Canada that contributed funding to the initiative. The Province of Nova Scotia has also shown its support by providing funding to develop and launch the African Nova Scotian Connector Program, aimed at improving

labour market outcomes for ANS individuals. This collaborative effort signifies a collective commitment to rectify historical injustices and create a more equitable economic environment for African Nova Scotians.

The African Nova Scotian Road to Economic Prosperity Action Plan stands out as a pioneering model for community-led, economic development that embodies a comprehensive strategy to address systemic barriers while fostering economic inclusion and development. Its emphasis on unity, land ownership, and increased access to education and entrepreneurship opportunities offers a blueprint for other communities seeking to overcome similar challenges and achieve economic prosperity.

Through this Plan, Halifax addresses SDG 8.3 and 10.2 related to equitable opportunities for economic development, and the Urban Monitoring Framework indicator for measuring the unemployment rate (as referenced and described in the *City Prosperity Index (CPI)*).

Factors contributing to its creation:

The Road to Economic Prosperity Plan was created to address unresolved historical issues impacting African Nova Scotian communities and neighbourhoods. These issues included oppressive planning policy and administrative orders that negatively impact economic progress of African Nova Scotians. The African Nova Scotia Integration Office (ANSIO) and the Halifax Partnership began an intense community consultation process to identify all the issues and a focussed approach to address them. The impetus for action was a deeply rooted desire to rectify historical injustices and dismantle systemic barriers that have long impeded the economic progress of African Nova Scotians. The contributing factors included a pressing need to confront and transform the structural challenges within education, labor market integration, and access to business opportunities. It recognized the stark economic disparities that have persisted and the necessity for strategic, community-centric initiatives to promote equitable development. The Plan was conceived as a collaborative effort, reflecting a collective recognition among policymakers, community leaders, and economic stakeholders that there was a critical need for intentional, inclusive strategies to catalyze positive change and economic empowerment within the African Nova Scotian community. The City's role is to make the Plan's implementation progress measurable and support the work with financial and human resources.

Resource requirements for implementation:

The Plan reflects a collaborative effort led by the African Nova Scotian community that has received significant financial backing, staffing, and partnership support to ensure its success. Financially, the Province of Nova Scotia allocated \$150,000 to the Halifax Partnership to support the implementation of the Plan during its third, fourth, and fifth years. This funding is critical for continuing the advancement of the Plan's strategic priorities, such as building community unity and capacity, establishing land ownership, and increasing participation in education and employment.

In terms of staffing, the plan is guided by the Road to Economic Prosperity Advisory Council, which includes representatives from each Black community in the Halifax region and organizations involved in economic development and capacity building. The Advisory Council's work is supported by an Elder Council, a Youth Council, and several working groups with representatives from African Nova Scotian communities throughout the province. This structure ensures diverse representation and informed decision-making.

At the City, the work requires human and financial resources to ensure timelines and objectives are met. Training for City Council members is also provided as needed, along with a communication strategy that provides the necessary structure to maintain a community-led focus that helps to keep the community informed and aligned.

Partnership resources are also a key component of the plan, with the Halifax Partnership serving as the project office and coordinating body for implementation. They work closely with the Halifax Regional Municipality, the Province of Nova Scotia, private sector sponsors like Royal Bank of Canada, and other partners to foster business growth, talent acquisition, and investment in Halifax. These concerted efforts aim to create vibrant communities by addressing economic prosperity challenges and leveraging opportunities identified through consultations with African Nova Scotian communities.

What is working well:

The work being community-led is critical to the Plan's success. The process for building trust between the Halifax Regional Municipality and the ANS community is essential and includes City staff participation in community walkabouts as well as attending ANS hosted community events and activities. As the Plan enters its third year, it continues to focus on its core priorities while celebrating the progress made thus far. The annual Road to Economic Prosperity Summit serves as a platform for sharing achievements, discussing ongoing challenges, collecting feedback, and strategizing next steps.

Additionally, over the past two years, significant strides have been made in economic and community development for African Nova Scotian (ANS) communities in Halifax. Key achievements include the integration of community action planning into the Halifax Regional Municipality's Regional Plan, substantial boundary expansions and rezoning efforts in Beechville—a historically Black community—and similar rezoning initiatives in the Hammonds Plains area. Additionally, the launch of the African Nova Scotian Prosperity and Well-being Index marks a crucial step towards measuring and enhancing the quality of life for ANS communities.

A standout project involves efforts to redevelop the Nova Scotia Home for Coloured Children property along Highway 7 in Westphal into Kinney Place. This ambitious initiative aims to create a multifunctional space that combines business, housing, and recreational opportunities tailored to the needs and aspirations of the African Nova Scotian community. Kinney Place is expected to not only provide more housing, but also open up new avenues for employment and entrepreneurship, contributing to the overall economic empowerment and prosperity of African Nova Scotians.

What is needed to make further progress:

Ongoing funding and a process to embed work outcomes in policy and systems at the municipal and provincial level is key. To make further progress, the Road to Economic Prosperity envisages the development of community action plans tailored to African Nova Scotian communities will support local needs via Community Benefit Agreements. Community Benefit Agreements (CBAs) represent formal, legally-binding contracts involving communities, governmental bodies, and private sector developers. These agreements empower communities to exert influence over development initiatives, ensuring that their priorities are addressed and that projects yield tangible benefits. In one case, a Social Benefits Contract stipulates that the contractor must provide employment, training, apprenticeship, and professional development opportunities tailored to equity-seeking groups, notably Indigenous and African Nova Scotian

communities. Moreover, the contractor is obligated to develop a Supplier Diversity Plan aimed at engaging a broad spectrum of suppliers representing the full diversity of the community.

How progress is being tracked:

In addition to tracking and reporting at the annual Road to Economic Prosperity Summit, progress is being measured using a "Prosperity and Well-being Index," specifically designed for the ANS community. This index is a composite measure that looks at various social and economic indicators to capture the real-life conditions of Black people living in Nova Scotia. It includes factors such as population demographics, educational attainment, income levels, and housing conditions.

The purpose of this index is to provide research-based insights that can be used to assess the impact of economic activities, as well as the effectiveness of governmental policies, laws, and regulations that affect the Black population in Nova Scotia. The data collected and analyzed through this index supports the ANS community in advocating for policy changes, funding, programs, and setting development priorities.

The data for the index is sourced from Statistics Canada, which collects information every five years. A dedicated team of researchers has worked to disaggregate this data by racial identity, allowing for a focus on those who identify as Black, African Canadian, or persons of African descent residing in Nova Scotia. The index also examines generational data, differentiating between first, second, and generations beyond the second among Black Nova Scotians.

Advice to cities seeking to replicate this initiative:

The city's relationship with the community is vital for success. Honesty, transparency and trust are critical factors. Respect for communities' knowledge of their history and future is also part of the constellation of critical factors. Sharing and sometimes changing policy can also increase trust and create true collaboration.

Further information:

https://anseconomicprosperity.com/uploads/ANS-Road-to-Economic-Prosperity-2022-Progress-Report.pdf

https://halifaxpartnership.com/news/article/the-african-nova-scotian-road-to-economic-prosperity-action-plan/

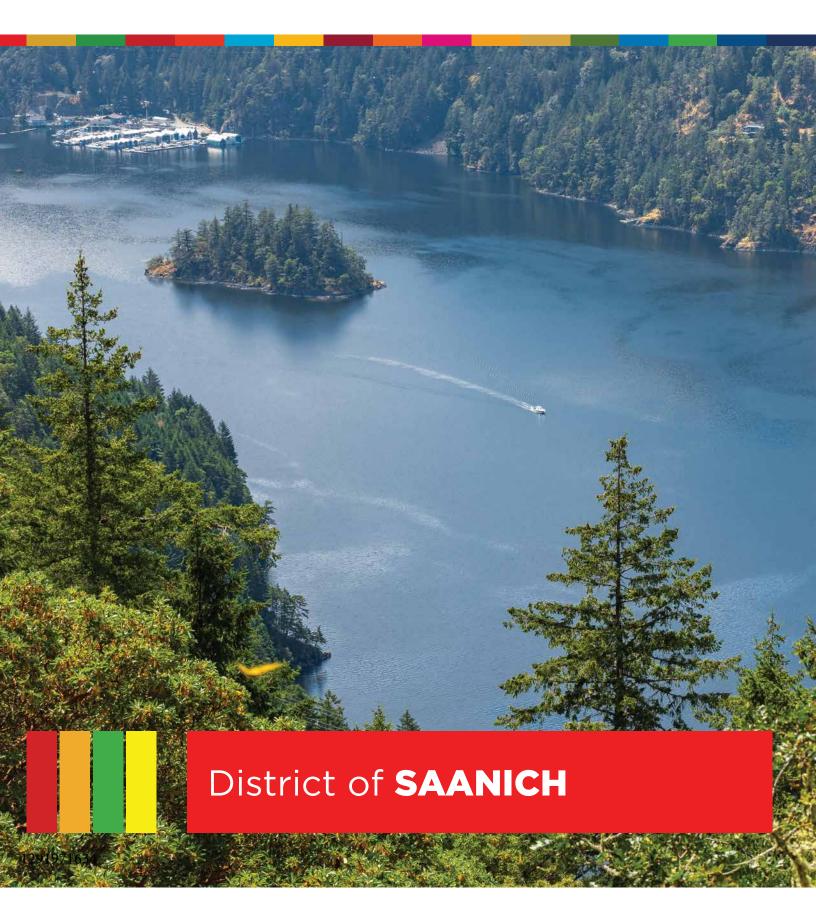
https://halifaxpartnership.com/news/article/african-nova-scotian-community-launches-economic-plan/

https://halifaxpartnership.com/news/article/african-nova-scotian-road-to-economic-prosperity-enters-its-third-year-of-progress/

https://anseconomicprosperity.com/the-plan

https://halifaxpartnership.com/sites/default/uploads/ANS-Road-to-Economic-Prosperity-Action-Plan-Report.pdf





4.3 Environment

Inclusive Environment

DISTRICT OF SAANICH



Name of City: District of Saanich

Name of Initiative: One Planet Saanich

UMF Attribute:

Global Urban Monitoring Framework (UMF) Indicator:

Inclusive Environment 3.2.2. Education for Sustainable Development

#45 Extent to which cities and regions mainstream global citizenship and education for sustainable development in their education systems.

SDG Target 4.7: Ensure that all learners acquire knowledge and skills needed to promote sustainable development, including among others, through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of culture of peace and non-violence, global citizenship and appreciation of cultural diversity and culture's contribution to sustainable development.

SDG Target 17.17: Encourage and promote effective public, public-private and civil society partnerships, building on the experience and resourcing strategies of partnerships.



Summary:

The One Planet Saanich project works to develop a shared commitment and language regarding sustainability. The project is centered around building community engagement and discussing sustainability efforts and potential across local issues. It works across the community with different stakeholders including: schools, business and community groups to build their own *One Planet Action Plans*. The current cohort includes various schools, a church, local businesses, community networks, and wellness groups. These community organizations develop *One Planet Action Plans* through regular check-in meetings, training sessions, an annual student challenge, networking events.

Throughout this process of working with the community, the District of Saanich raises awareness about the ten principles within its One Planet sustainability framework, which has been adopted as part of its Official Community Plan (2024): Health and happiness; Equity and local economy; Culture and community; Land and nature; Sustainable water; Local and sustainable food; Travel and transport; Materials and products; Zero Waste; and Carbon Energy.

Through participation in this initiative, Saanich addresses SDG 4.7 and 17.17 education and partnerships for sustainable development, and the Urban Monitoring Framework (UMF) indicator for measuring the extent to which cities are mainstreaming global citizenship.

Factors contributing to its creation:

Sustainability has been a core value for the District throughout its history. Their 2008 Official Community Plan is called "Sustainable Saanich" and references *The Brundtland Commission*. It defines three key pillars: Environmental integrity, Social wellbeing, and Economic vibrancy.

They then established a Sustainability Division within the Planning Department, specifically dedicated to climate action and adopted their first Climate Action Plan in 2010 and Adaptation Plan in 2011. The District of Saanich has a long history of collaborating with community groups to advance its sustainability agenda. For example, the District made a 100% renewable energy commitment in 2017 through collaboration with the BC Sustainable Energy Association (BCSEA) and Greater Victoria Action Together, a membership organization who accessed the District's Community Small Grants program through funding from the District. A Net Zero GHG Target was established in 2019 as part of climate emergency declaration, inspired by worldwide student protests. This leadership culminated in the civil society organization OneEarth Living collaborating with international consultancy BioRegional in identifying the District as a potential pilot for the One Planet Living initiative. This came at a time that the District was also seeking ways to engage the community on an updated Climate Plan to deliver on these new targets. One Planet Saanich became an integral part of that engagement process with BioRegional and OneEarth Living providing funding support for this work. This contributed not only to the development of the award winning 2020 Climate Plan: 100% Renewable and Resilient Saanich, but also its implementation in the years since.

Resource requirements for implementation:

One Planet Saanich was empowered by its skilled staff acting as community convenors. They provided expert guidance to community members navigating the complexity of the issues arising within their own One Planet Action Plans. There was significant funding support initiated through BioRegional, and subsequently carried-on by the District with support from a local credit-union, Vancouver City Savings Credit Union (Vancity). Due to the extensive resources and staff provided by the above-named organizations, the District staff burden was less than 0.2 FTE (20% of a staff person's time). The initiative currently has 21 participating organizations, and the potential for expansion would require more resources but could address the nuanced interests of groups across the community, for example including more schools, fleet operators, or retailers.

What is working well:

The initiative has been a great opportunity for sharing information among the many different actors involved in sustainability across the District, such as active NGOs and citizen participants. A strong feature of the initiative is its commitment to prioritizing individual actions and projects, and to sharing information on how to pursue them. For example, there is significant concern regarding climate action but differing priorities for action. Through this initiative, the community is discovering its core priorities. A detailed, consumption-based GHG emissions inventory and a corresponding ecological footprint analysis have been useful inputs to guide community actions, alongside other resources, often provided by the District. These have helped locate the biggest levers to reduce GHG emissions, such as supply chain management rather than recycling. There have also been successful community-hosted events to connect participants with service providers who could assist with implementing actions.

What is needed to make implementation progress:

Supporting the increased involvement of a wider range of organizations would require additional funding. Gauging interest to include many neighbouring municipalities in a regional

initiative has proven challenging. Various participant groups face different constraints; for example, schools often engaged teachers as a means of direct communication with students, but school administrators or operations managers were engaged less often.

How progress is being tracked:

The most important indicators are the quantity and type of organizations involved, the strength of their commitments, and how effectively they are implementing the related actions. The District committed in their newly drafted Official Community Plan (2024) to *One Planet Living Principles* and a One Planet Living target. They are also using the *ecoCity Footprint Tool* that measures how many earth equivalents would be required if the world's population had the same consumption habits as Saanich residents. The District measures progress on climate action annually, using both a GHG emissions inventory and a comprehensive suite of subtargets that can be used to demonstrate the impact of climate actions within the community.

Advice to cities seeking to replicate this initiative:

Interested cities must have the capacity to consistently demonstrate the benefits of climate action and sustainability in their communities. It is important to be able to balance communications between showing active progress year-after-year while acknowledging that there remains more work to be done and more ambitious actions are needed. Advocating for the well-being of people and the planet has become part of the District of Saanich's identity. Holding these values at the core of a city's work is important in the success of this initiative. For a city to become a trusted partner, it is also important to communicate honestly about the severity of challenges being faced, without over or under-representing them. Once municipalities are seen as a trusted source of information, community collaboration on actionable solutions becomes possible. Partnerships are crucial as climate change and sustainability are not challenges that one entity can solve alone.

Further information:

https://www.saanich.ca/EN/main/community/sustainable-saanich/climate-change/one-planet-saanich.html

https://oneplanetbc.com/one-planet-saanich/

https://www.bioregional.com/projects-and-services/case-studies/how-saanich-canada-created-a-thriving-hub-of-one-planet-living-activity



Resilient Environment

CITY OF GUELPH



Name of City: Guelph

Name of Initiative: Natural Heritage Action Plan (2018)

UMF Attribute:Resilient
Environment

Global Urban Monitoring Framework (UMF) Indicator

3.3.4. Protected Natural Areas

#49 Land under protected natural areas as a proportion of the area of a city.

New Urban Agenda 48: Establishing and managing protected areas is part of the economic development and planning process, it ensures that sustainable development takes into account national cultural heritage and conservation policies.

SDG Target 15.1: By 2020, ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains and drylands.



Summary:

The City of Guelph's Natural Heritage Action Plan (NHAP) was enacted to protect, maintain, restore, and improve natural heritage systems and water resources through stewardship networks and community partnerships. Guelph identifies its natural heritage system as a combination of all natural spaces, interwoven and connected by ecological and hydrological linkages. The NHAP takes a watershed and natural heritage system approach that provides specific actions as a framework to protect, maintain, restore and improve natural and water resources. The NHAP was informed by community engagement and involvement.

The City has identified several key objectives, including immediate actions directly affecting natural heritage, as well as long-term goals. Salient objectives that are more prevalent within the short term include ensuring diversity of natural features, quality of water resources, tree canopy enhancement, local stewardship, and stormwater management. Longer term objectives that must actively be prioritized include the consideration of ecosystem services for future generations, balancing activities without negatively impacting environmental functions, assessing and mitigating impacts of development, and building climate change resilience.

The NHAP is organized in five sections. 1. Watershed planning to manage growth and infrastructure. Natural heritage and biodiversity conservation. 3. Data and information management. 4. Resilience and restoration planning. 5. Community engagement. Each section contains targeted actions, potential outcomes, budgeting expectations, and leadership guidance.

The City has continued to share its progress within the community, highlighting specific NHAP actions that are completed each year.

Through this effort, Guelph addresses New Urban Agenda (NUA) 48 for establishing and managing protected areas, SDG Target 15.1 to ensure conservation of terrestrial ecosystems, and Urban Monitoring Framework (UMF) indicator for protected natural areas.

Factors contributing to its creation:

The City has been gradually implementing environmental plans and strategies, particularly the provincial government's policy direction to protect natural heritage systems. These plans and strategies are helping guide implementation efforts to best adhere to the collective vision of the future. From the outset, community members have been engaged in identifying priorities and advocating for what they believe should be protected through natural heritage. The main focus of the strategy is protecting, enhancing, and restoring natural heritage in light of urbanization. The City of Guelph is subject to A Place to Grow: Growth Plan for the Greater Golden Horseshoe which projects significant residential and employment growth in the planning horizon. Through the NHAP, and the Official Plan, the City is oriented to protect the natural heritage system using an environment first approach as Guelph intensifies and becomes more urban.

The NHAP was led and completed by City staff. Prioritization of NHAP actions was informed by community engagement. The NHAP was approved by City Council.

Resource requirements for implementation:

Throughout implementation, the most important resource proved to be the time of staff. Almost all actions have or will be implemented and followed through by staff members across various departments: planning, engineering, water services, forestry and sustainable landscapes, and parks planning. In consideration of which actions are currently being pursued, City staff emphasizes the potential in retaining a consultant for technical input, for example drafting designs to guide how wildlife tunnels and funnel fencing should be implemented. Additionally, there is also partnership involvement with the Grand River Conservation Authority, responsible for flooding and natural hazards, as well as some active involvement by community volunteers. Environmental Planning currently has a complement of four, full-time staff members, all contributing to the NHAP actions as a component of their work. The City's Forestry and Sustainable Landscapes department is also key to the completion and success of NHAP actions.

What is working well:

A critical component to the NHAP's success has been competent staff and their shared commitment of protecting the natural environment. Having staff regularly working towards maintaining a dialogue regarding their challenges, collaborating on how to best approach them, as well as sharing their successes helps align staff on their outlooks and consideration of specific strategies. Since the NHAP was created with participation from different departments to integrate priorities and issues, it illustrates the strength of their plan and how it integrates multi-faceted issues and synthesizes them as achievable actions. Through this, each department can view their actions and strategically adjust to further advance shared sustainability goals. It highlights the opportunities to align regular work with sustainability goals.

What is needed to make implementation progress:

The most important resource for progress is staff time. The presence of competing priorities has proven difficult in managing the time and capacity to commit to NHAP-related projects.

Initially, the NHAP arose with two committed Environmental Planning staff members. Therefore, having appropriate staff available to complete the work is pivotal and necessary to continue progressing on this type of initiative.

How progress is being tracked:

City staff works to track progress of the actions, and consider if they are fully completed and their level of success. They report their findings and progress in completing actions to City Council. Many of the actions, once completed, will serve as a guiding tool more than traditional measurements for success. For example, one action is to organize a city-wide environmental monitoring framework, and once that is implemented the City can focus on more traditional environmental indicators. Currently, its actions are measured as complete, incomplete, and in progress. Their website is also used to report on action progress enabling the public to see what progress is currently being made. The City also produces an annual sustainability report where certain actions are carried forward through the report, including the completion of NHAP actions and metrics related to canopy cover and the area of natural heritage system protected under City's policies. Presently, City staff do not have enough data granularity, and are working to expand availability of data through their work on natural heritage projects.

Advice to cities seeking to replicate this initiative:

The City's implementation experience has highlighted the importance of building programs alongside actively engaging City staff across different departments. This prompts staff to identify different target actions and conceptualize how essential these changes and priorities are to the City's future. They underline the importance of engaging new staff as they onboard onto involved teams. Through the NHAP process they have identified the need for sub-committees, including an Ecological Restoration Implementation Committee. Through this, whenever a City department is engaged in restoration activities there always remains an open invitation to discuss natural heritage improvement opportunities. This has led to different opportunities including improving planning of tree and shrub planting. For example, turtle nesting substrate to encourage turtles to nest in an ideal, safer locations, in comparison to busy sports fields. Additionally, breaking down information and communication silos has been crucial, and ensures policy alignment within implementation strategies. The City has also seen success through strategic community engagement, with programs such as "Adopt a Park" to contribute to environmental stewardship of natural heritage in city parks. This active involvement within the community helps in extending the City's reach and ability to connect residents with nature.

Further information:

https://guelph.ca/plans-and-strategies/natural-heritage-strategy/

https://guelph.ca/wp-content/uploads/Recommended-Natural-Heritage-Action-Plan.pdf

https://guelph.ca/plans-and-strategies/natural-heritage-action-plan-2/

https://guelph.ca/wp-content/uploads/Clair-Maltby04NHSBoards.pdf



Sustainable Environment

CITY OF TORONTO

13 CLIMATE ACTION	Name of City: Toronto
	Name of Initiative: Transform TO Net Zero Strategy
UMF Attribute:	Urban Global Monitoring Framework (UMF) Indicator:
Sustainable Environment	3.4.1 Total greenhouse gas emissions per year per capita #50 Sum of emissions of direct GHGs: carbon dioxide (CO2), methane (CH4), nitrous oxide (N2O), perfluorocarbons (PFCs), hydrofluorocarbons (HFCs), sulphur hexafluoride (SF6) and nitrogen trifluoride (NF3), measured in units of CO2-equivalent.

SDG Target 13.2: Integrate climate change measures into national policies, strategies and plans.

Summary:

The city of Toronto has set an ambitious target of *net zero green house gas (GHG) emissions community-wide by 2040*. The strategy outlines emerging opportunities and *30 actions to achieve this target*. As well the plan has accelerated short-term implementation by highlighting interim targets for 2030. The City sees itself as a driving force to lead by example and encourage private and non-profit actors to contribute to a series of progressively ambitious reduction targets. Setting clear expectations within a roadmap to reach net zero by 2040, GHG reduction targets accelerate in 5-year increments. Each targets starts from a 1990 baseline, with a 30% reduction targeted by 2020, continuing to 45% by 2025, 65% by 2030, and concluding with eventual net zero by 2040.

The City acknowledges that this will require rapid action to properly scale up existing programs to meet their ambitious goals. By 2030, they will need to have actions and targets in place for various key sectors, including buildings, the transportation sector, and waste. Through its influence, the City plans to regulate, advocate, and facilitate change in five crucial areas: 1. Demonstrating carbon accountability locally and globally, through a carbon budget for its own operations and for the community. 2. Accelerating a rapid and significant reduction in natural gas use. 3. Establishing performance targets for existing buildings. 4. Increasing access to low-carbon transportation options and infrastructure, including walking, biking, public transit, and electric vehicles. 5. Increasing local renewable energy to contribute to a resilient, carbon-free grid.

Through Transform TO, Toronto is addressing SDG Target 13.2 to integrate greenhouse gas measures into plans, and Urban Monitoring Framework (UMF) indicator for measuring annual greenhouse gas emissions per capita.

Factors contributing to its creation:

Toronto has had a climate strategy for a long time, dating back at least to 2007 with a renewed version in 2015. The accelerated push to achieve net zero by 2040, ten years ahead of most global commitment timelines, was in response to a global climate emergency declared by the

City in 2019, and specific incidents such as increased rain and flooding events. The decision to declare a climate emergency was the impetus to set a target for net zero GHG emissions by 2040. That declaration expedited targets and pushed actions to be as ambitions as possible. Transform TO was brought forward in 2021 and Council suggested expediting to 2040 from 2050 with unanimous support. When the expedited strategy was subsequently brought forward that was also unanimously adopted.

Resource requirements for implementation:

All levels of government and the community were identified as necessary contributors to Transform TO. The cost of the program is estimated to be \$150 billion, which it was thought must be shared between residents and the private sector. The plan implicates almost every City division and agency: infrastructure, buildings, transit, as well as less obvious ones addressing emergency shelter and seniors' long-term care. Actions are numerous and varied and necessarily include private sector and residents. For example, broad sector engagement is necessary to tackle the climate impacts associated with approaches to food procurement, retrofitting 480,000 buildings, and switching people from their cars to greener transportation modes. The climate strategy has 100 City staff directly involved with each having responsibilities that affect the plan. The Climate Leadership Table is represented by almost every division and agency and chaired by the CFO and Deputy City Manager.

What is working well:

A key element has been the City's extensive data and modelling. The Strategy does not describe every necessary action in detail. Instead, it maps a pathway to get to net zero. It illustrates the realm of possibility and suggests a target based on what is possible. Reliable data was a key aspect, as the City had to be able to trust the data in order to fully commit. Following agreement about the data, the resources then become a matter of will and prioritization. Additionally, a well-organized community is critical, as demonstrating residents' willingness to participate in the plan is key. The City must articulate clearly what is needed and ongoing forums ensure continued support and participation, for example, through a Climate Advisory Group comprising industry sectors alongside residents.

The City is still in the early days of aligning work units with the plan, as each division is starting from a different place and coming in with varying levels of expertise. Some residents find it challenging to see how climate change is affected by their activities. To address this, the City assembled a team dedicated to explaining the plan from a *health* and *socio-economic* perspective. There is no single way to describe what is working well, as there are many lenses and all have value: competitive economic development, seniors' needs, social equity, etc. Elected officials must advocate among their peer councillors and community members to generate the innovative thinking and flexibility to move forward simultaneously. This is a very important factor in enabling staff to work innovatively with Council recommendations and engender a willingness to lead with new ideas rather than simply replicate what others have done.

What is needed to make further progress:

The Government of the province of Ontario, within which Toronto is located, needs to delegate authority for sections of the Ontario Building Code to the City level to enable municipal consideration of stricter performance than what is in current building code requirements for new development or retrofits. All of Ontario is regulated by one code, despite the differences in size, urban form, and climate focus between its largest and smallest cities. The success of Toronto's plan is built around the concept of electrification; therefore, it requires Ontario Hydro, the electrical generation utility, to make continued progress on expanding green energy sources. Ontario Hydro's electricity is currently over 90% carbon-free, prompting the City to promote electric heat-pumps and electric vehicles, while discouraging the use of natural gas.

The City hopes to incentivize residents toward retrofits or purchasing electric vehicles through national government financial support and grants. The Government of Canada has various incentive programs including zero interest loans offered through the Canada Mortgage and Housing Corporation, and the City's plans rely on the continuation of these programs over the long-term. The reality is that providing funding out of the property tax base is not sufficient. Especially when transformation of the supply chain is also needed, which requires a regional and national perspective. The City is too small an actor to change the economic system on its own. Toronto also has its own financial challenges, with a \$1.5 billion debt, it has identified longterm capital challenges which will require prioritization and new sources of revenue to fund. More broadly, aside from financial aspects for corporate actions, getting to scale requires the City to connect with residents about the positive actions they can take and then making it easy for them to do so. The building stock varies from new 70-plus story condominium high-rises to older, mostly 1950s, single family homes. Figuring out a way to help residents in their decisions and actions is critical because it is not simple for the average person to take on a home retrofit. It takes a lot of planning and work so the easier it can be made for people to initiate these changes the better.

How progress is being tracked:

Progress is being tracked firstly through annual reporting on actions under the plan. Secondly, tracking takes place through emissions inventories at both the community and municipal corporate levels. Thirdly, the City tracks an annual carbon budget, which was recently adopted by Council in April 2023. This aligns the City's financial budget with its emissions profile to ensure that the City is timing various actions effectively based on its capital renewal cycle. For every project, the City considers if these capital investments make sense in terms of its emissions goals. Additionally, the City does an annual ESG (Environment Society Governance) report that enables analysis of how climate actions contribute to ESG goals.

Advice to cities seeking to replicate this initiative:

There is a global community to support cities to develop a plan, strategy, and targets. Most cities are dealing with the same challenges: buildings, transportation, and waste. There are well mapped pathways and a playbook that already exists. Each city must develop their own baseline information to focus activities on the high-emissions areas and formulate a plan based on what is possible for them to do. Incredibly important for Toronto's plan has been consultation, engagement and collaboration with residents. Climate action is not simply a desktop exercise. It requires actually working with community residents to understand their issues and then figure out how to support them.

Further information

https://www.toronto.ca/services-payments/water-environment/environmentally-friendly-city-initiatives/transformto/#:~:text=Toronto%20City%20Council%20has%20adopted,most%20ambitious%20in%20North%20America.

https://www.toronto.ca/legdocs/mmis/2021/ie/bgrd/backgroundfile-173757.pdf

https://www.toronto.ca/news/net-zero-by-2040-city-council-adopts-ambitious-climate-strategy/

https://www.toronto.ca/wp-content/uploads/2019/06/8f33-Benefits-of-Actions-to-Reduce-Greenhouse-Gas-Emissions-in-Toronto-Health-and-Health-Equity.pdf

https://www.toronto.ca/wp-content/uploads/2019/06/96ef-Benefits-of-Actions-to-Reduce-GG-Emissions-in-Toronto-Prosperity-and-Socio-Economic-Equity.pdf



CITY OF MONTRÉAL

13 CLIMATE ACTION	Name of City: Montréal
	Name of Initiative: Montréal Climate Partnership
UMF Attribute:	Urban Global Monitoring Framework (UMF) Indicator:
Sustainable Environment	3.4.1 Total greenhouse gas emissions per year per capita #50 Sum of emissions of direct GHGs: carbon dioxide (CO2), methane (CH4), nitrous oxide (N2O), perfluorocarbons (PFCs), hydrofluorocarbons (HFCs), sulphur hexafluoride (SF6) and nitrogen trifluoride (NF3), measured in units of CO2-equivalent.
SDG Target 13.2: Integrate climate change measures into national policies, strategies and plans.	



The Montréal Climate Partnership (MCP) is an independent collaborative initiative aimed at mobilizing the strengths of the Montréal community to accelerate the decarbonization of the metropolis and strengthen its resilience, putting Montréal on the path to carbon neutrality by 2030. The initiative brings together nearly a hundred organizations from the economic, nonprofit, philanthropic, trade union, and institutional sectors. It builds on the successes of previous collaborations between the City of Montréal and C40 Cities and takes inspiration from international models like Boston's Green Ribbon Commission.

Montréal is addressing SDG Target 13.2 for integrating climate change measures into strategies and plans, as well as Urban Monitoring Framework (UMF) indicator measuring annual greenhouse gas emissions per capita. It is also addressing SDG Target 13.1 to strengthen resilience and adaptation capacities in the face of climate hazards and related natural disasters.

Factors contributing to its creation:

Factors contributing to the creation of the MCP include the commitment of numerous leaders from various sectors with determination to accelerate climate action in Montréal. Under the impulsion of the Trottier Family Foundation and the Foundation of Greater Montréal, the PCM was created with a desire to support the City in achieving its targets on the occasion of the launch of its Climate Plan 2020-2030. This includes 46 actions, all of which are linked to UN Sustainable Development Goals, and categorized into four action areas. 1. Speed up the ecological transition. 2. Strengthening solidarity, equality, and inclusion. 3. Promote democracy and participation. 4. Stimulate innovation and creativity.

With Montréal having fertile ground for collaboration and mobilization, the objective is to create a collective movement that will place the metropolis as a leader in climate action and ultimately make it possible to improve Montréalers' quality of life and reduce social inequalities that are exacerbated by climate change.

Resource requirements for implementation:

For implementation, the MCP has dedicated a significant starting budget of \$1.6 million to facilitate collaboration and social dialogue for concrete efforts to reduce GHGs and strengthen

the resilience of the metropolis. The contributions from various foundations and from the City of Montréal support the mission of the PCM and its mobilization. All of Montréal's leaders achieve the metropolis' climate objectives through teamwork and concerted action. Additional funding is also mobilized for the implementation of concrete collective projects and the annual organization of the Montreal Climate Summit.

What is working well:

Progress has been made in bringing together the community around concrete measures and making announcements and commitments to accelerate climate action. The partnership focuses on specific industries like building and transportation, which are among Montréal's largest GHG producers, and works closely with grassroots initiatives.

Among the Montréal Climate Partnership's strategic actions is:

- An influential steering committee in favour of achieving ambitious climate objectives, made up of 27 leaders from civil society, business, and major institutions.
- Collective projects structured to meet the needs of the community.
- A campaign and engagement platform that generated over 200 new high-impact climate engagements.
- Collective contributions to regulations and planning tools.
- The Montreal Climate Summit which has become one of the largest climate events in Canada.

What is needed to make further progress:

For the Montréal Climate Partnership to make further progress, a consistent increase in collaboration and resource allocation is essential. There needs to be a sustained commitment so that the PCM can mobilize more sectors and facilitate time-consuming cross-sectoral collaborations. Several barriers to climate action have been identified by partner organizations, such as the lack of coordination and coherence between the different levels of government, financial limits and the difficulty of mobilizing the entire value chain. The PCM must, therefore, work with a diversity of actors: private, public and civic, who must all engage, across all sectors of society, to foster a culture of shared responsibility and action towards climate goals. Additionally, innovative financing models and incentives could encourage wider participation from businesses and the community in climate action initiatives. Access to such resources and support can enable more stakeholders to implement sustainable practices and contribute to the city's overall climate resilience and carbon neutrality goals.

How progress is being tracked:

The progress of the Montréal Climate Partnership is monitored primarily within the framework of the Montréal Climate Summit, where collective progress is measured and shared. The Summit serves as a transparent forum for major announcements related to climate issues (mitigation and adaptation) in Montréal. It acts as a forum for various stakeholders to present updates, share successes, and discuss challenges, thereby offering a transparent account of the progress made towards the city's climate objectives. The PCM regularly shares the monitoring of commitments made by its partners and highlights collective progress and successes of the community to make the sharing of experiences useful. In addition to its website, the PCM is collaborating with several partners to develop a collective project for sharing acquired climate data which will provide a fairer view of achieving climate targets.

Further information https://montreal.ca/en/articles/montreal-2030-first-strategic-plan-8318		
https://www.sommetclimatmtl.com/about		
https://climatmontreal.com/		
https://fgmtl.org/en/news/launch-of-the-montreal-climate-partnership/		
https://fgmtl.org/en/our-impact/montreal-climate-partnership-the-fgms-commitments/		
https://climatmontreal.com/en/salle-de-presse/le-partenariat-climat-montreal-celebre-ses- 2-ans-avec-la-concretisation-dun-pole-de-transition-climatique-pour-les-entreprises/		



4.4 Culture

Safe and Peaceful Culture

CITY OF EDMONTON

10 REDUCED INEQUALITIES	Name of City: Edmonton
₹	Name of Initiative: Community Safety and Well-Being Strategy
UMF Attribute:	Global Urban Monitoring Framework (UMF) Indicator:
Safe and Peaceful Culture	4.1.1 Culture for Social Cohesion
	#53 Intercultural tolerance, interpersonal trust, and perception of gender equality.

Culture 2030/UNESCO 18: Aims to assess the degree of inter-cultural understanding, to measure the degree of personal acceptance of people from other cultures and to measure the gaps between women and men in respect to their opportunities and rights to take part in the cultural, social, economic and political life of their country.

SDG Target 10.3: Ensure equal opportunity and reduce inequalities of outcome, including by eliminating discriminatory laws, policies and practices and promoting appropriate legislation, policies and action in this regard.



Summary:

Canada's safest city by 2030. The Strategy is a collaboration among multiple partners to ensure each person who makes Edmonton home feels a sense of purpose, safety and stability. The strategy focuses on addressing the root causes of complex social challenges such as poverty, racism, social exclusion and mental health to achieve a long-term, multi-dimensional view of safety and sustained outcomes. The Strategy rests on seven mutually reinforcing pillars of action. Some pillars revolve around interventions in the social and cultural fabric of the City such as: Anti-racism initiatives, Indigenous Reconciliation, the Creation of Safe and Inclusive spaces, increased Well-being of communities and the Implementation of Equitable Policies. Economic determinants of safety inform the pillar to Establishing Pathways Out of poverty. The final pillar of Crime Prevention and Intervention applies a justice lens to the issue. Each pillar represents a distinct focus area, contributing to a comprehensive approach toward community well-being and safety.

A Community Safety and Well-being Dashboard serves as a tool for Edmontonians to monitor the changing dynamics of the city as efforts are made to enhance safety and well-being. On a quarterly basis, the dashboard provides transparent updates regarding the actions undertaken by the City to instigate meaningful change. Approximately \$20 million in annual funding is invested in tangible action through the CSWB strategy.

The strategy's targeted investments and actions have provided the capacity to advance goals to reduce homelessness, prevent drug poisoning, improve social inclusion, advance

truth and reconciliation, and address other complex social issues, while reinforcing public safety. Collaboration with community partners has led this work with strides being made in identifying shared priorities, services gaps to address and opportunities to work together.

Through the Community Safety and Well-Being Strategy, the City of Edmonton is advancing SDG Target 10.3 to reduce discriminatory legislation and the Urban Monitoring Framework (UMF) indicator measuring social cohesion.

Factors contributing to its creation:

The program was influenced by the 2020 murder of George Floyd while in police custody. City Council created a task force to investigate racism in the police, which led to the realization that this was a sliver of a much larger issue. Edmonton had recently welcomed a new city manager, who together with staff was observing interconnected events and issues, but could not piece it all together. Through staff collaboration they began mapping out different issues, connecting their data, and discussing the results with the community and senior levels of government. Staff received positive response to a visual presentation highlighting their ideas, and through feedback this eventually evolved into the seven pillars of the strategy. The City then started a consultation process, talking with approximately 100 stakeholders. The strategy remained City-led but ultimately community driven, with an iterative framework that will evolve with the needs of Edmonton's residents. After 18 months in the City Manager's Office, the initiative was moved to the Community Services Department for ongoing development and implementation.

Resource requirements for implementation:

City council has transferred policy funding to a designated fund, establishing initial financing for the initiative. However, additional support from other levels of government is required to bolster initiatives concerning housing and related objectives. Implementation is overseen by a part-time project manager, alongside the Community Service's Director of Strategy, who dedicates a portion of their time to the endeavor. Efforts are made to draw input from various departments within the organization. Initially, focus is directed towards collaboration with community partners, followed by efforts to stimulate engagement at decision-making levels throughout the City, particularly in areas such as planning and budgeting. Presently, existing staff resources are managing these tasks, underscoring the necessity of reallocating responsibilities within existing staff portfolios. The City has seen progress in fostering an internal cultural shift, evidenced by the growing adoption of relevant terminology. Continuing use of existing staff resources and reallocating responsibilities is required to sustain these efforts effectively.

What is working well:

The strategy aligns with existing priorities and mandates, and it utilizes existing resources and expertise that together create a natural base of administrative and policy support. That connection with social services has given this project many advocates outside the City as well. Those relationships are critical as the City of Edmonton does not own the entire scope of work needed to implement the strategy. Achieving community safety and well-being is a shared responsibility across many groups.

What is needed to make further progress:

Time is the biggest factor, and staff must manage other issues simultaneously in consideration of what is preventative versus immediately necessary. These challenges have been present for a long time which is why a focus on root-causes is imperative. Staff acknowledge that they could place all available staff on this priority, and they still may not move forward

with competing agendas on community safety, with some pillars moving forward faster in comparison to others. For examples, anti-racism efforts have received additional funding and resourcing. As any one pillar moves forward, the whole strategy advances. One of the lessons learned in this space is that it takes a long time. Council originally directed staff to build an anti-racism strategy over 12 weeks, but it was soon realized that it will take much longer, particularly in consideration of the important contributions by the Indigenous community who are working at maximum capacity as they are often being asked to participate and provide guidance.

How progress is being tracked:

A first CSWB evaluation report is currently in development to identify successes, gaps and areas in need of further action. A public CSWB dashboard also highlights key social indicators to monitor progress made. Staff members are currently engaged in the process of identifying additional indicators, aiming to integrate diverse perspectives into their approach. While the Urban Monitoring Framework offers numerous promising indicators, there remains a gap in data collection. This initiative is still in its nascent stages, with staff members actively assessing existing data collection practices. Despite thorough exploration, they have yet to identify a Canadian jurisdiction that has achieved success in this particular endeavor. Consequently, they are endeavoring to refine their approach through iterative processes, drawing insights from a multitude of examples.

Advice to cities seeking to replicate this initiative:

Council support through leadership is key to replicating the initiative. Additionally, investing the time in building relationships across the various community sectors prior to creation of a Strategy is crucial. This is seen as a matter of connecting the pieces together and considering how social services link with the business community and other departments across the City. It is smart to separate the "pie-in-the-sky" outcomes from those that a city has control over and can impact directly. Then work can progress to specify what needs business or community partners can support, followed by inviting them to define what their contribution could be or lead to. It is important to note that cities cannot just tell partners what the city needs. A dialogue that engages stakeholders based on their interests and capacity to participate and contribute is essential.

Clarity of language and orientation toward end goals is viewed as critical. Within the process there were many contested terms so being as clear as possible about what is to be achieved is important. It also encourages partners to join the collaboration if they can buy-in to a common vision.

Further information:

https://pub-edmonton.escribemeetings.com/filestream.ashx?DocumentId=142922

https://gis.edmonton.ca/portal/apps/sites/#/cswb/pages/data

https://www.edmontonpolice.ca/News/SuccessStories/CSWB

https://pub-edmonton.escribemeetings.com/filestream.ashx?DocumentId=196154



Inclusive Culture

CITY OF KELOWNA



Name of City: Kelowna

Name of Initiative: "See the Heat!" Program

UMF Attribute: Inclusive Culture

Global Urban Monitoring Framework (UMF) Indicator:

4.2.2 Access to Cultural Infrastructure

#55 Proportion of population with access to cultural infrastructure.

Culture 2030/UNESCO 20: Aims to assess the degree to which different people have access to cultural facilities.

NUA 50: Percentage subnational/local government budgets dedicated to climate change mitigation and adaptation actions.

SDG Target 7.3: By 2030, double the global rate of improvement in energy efficiency.



Summary:

The City of Kelowna's "See the Heat!" Program provides residents with forward-looking infrared (FLIR) cameras to detect air and energy leaks in their homes. These leaks can lead to issues such as mold, air contaminants, and increased electricity usage due to temperature fluctuations. By identifying sources of energy waste, users are prompted to seal these leaks and gaps. The City has implemented an innovative distribution plan through the public Okanagan Regional Library system that serves the general area where the City is located. Leveraging the Library's widespread presence and lending capacity enables a cost effective and convenient way to engage residents. The cameras easily connect to smartphones and tablets via a user-friendly application, allowing users to visualize heat distribution and loss in their homes. Additionally, draft-proofing kits, including weather stripping and foam insulation, were available during the initial roll-out of the program. The program also encourages residents to have their homes formally assessed for major inefficiencies and to take advantage of government incentives for subsidized efficiency measures.

The primary objective of the program is to educate residents about energy efficiency and empower them to make meaningful contributions towards a collective goal. By providing tools and resources, residents are encouraged to actively engage in energy-saving practices. This initiative has garnered significant interest from residents, evidenced by over 500 requests for the energy-saving kit within the first month of operation.

Through the "See the Heat!" program, the City of Kelowna is contributing to SDG Target 7.3 to improve energy efficiency, and Urban Monitoring Framework (UMF) indicator access to cultural infrastructure. This initiative also addresses the UMF Sustainable Environment attribute and the indicator measuring proportion of sub-national budgets dedicated to climate mitigation and adaptation.

Factors contributing to its creation:

Kelowna acknowledged the prevalent focus of climate action plans among local governments, typically emphasizing transportation, buildings, and waste management. Specifically, in Kelowna, buildings contribute to 40% of emissions, with existing buildings representing a significant portion of this figure. Encouraging residents to undertake home retrofits poses a considerable challenge, hindering progress toward emissions targets. This initiative aims to address the subdued demand for retrofits by educating residents on energy-saving opportunities within their homes. By offering a low-barrier approach to identifying areas of heat loss and facilitating retrofits, the program seeks to spur action. Leveraging the regional library system's existing infrastructure for program administration further strengthens its effectiveness, as it already possesses the necessary tracking and distribution mechanisms in place for lending out cameras.

Resource requirements for implementation:

To implement the project, a major upfront investment was the cameras themselves. The City did not have the capacity to administer the project; therefore, the library partnership was critical and contributed to its longevity. The program also originally started in partnership with the local electrical and gas utility service provider, Fortis BC. They provided funding to help supply draft-proofing kits that were also given out alongside the cameras. The City's already established resources and partnerships have proved crucial to the implementation of this innovative and engaging program.

The draft-proofing kits facilitated making immediate, minor home improvements. Enabling residents to begin with these easier measures promoted larger-scale actions to quickly follow suit and served as a strong basis for launching the program. As mentioned, there are more significant funding being offered by senior levels of government through a variety of home-energy retrofit incentives. There does remains gap between what retrofits are necessary and which are actively pursued. An important resource would be a method to track how far camera borrowers have advanced towards hiring an energy advisor and participating in the various GHG emissions mitigation incentive programs. The ability to demonstrate the connection between early engagement through the cameras and longer-term engagement in deeper energy retrofit activities would be important in keeping the utility or other funding over the long-term. Generally, their mandates require this type of rigorous, outcome-based measurement. Currently, the primary metric is direct participation in the program.

What is working well:

The program underscores the expertise of key staff champions, notably the Community Energy Specialist that oversees program management. Ensuring an adequate supply of cameras at the library is essential, alongside maintaining updated educational resources and rebate information. The library partnership is pivotal for the program's sustainability and widespread accessibility. Robust marketing and communication strategies, including local TV promotions and e-blasts, enhance community engagement. The program's initial success led to overwhelming demand, resulting in a substantial waiting list within weeks of launch.

From an equity standpoint, the city aims to offer the program free of charge, leveraging the library partnership to facilitate access through library card registration. Emphasis is placed on ensuring accessibility, with user-friendly instructions provided for the cameras. The interactive nature of the cameras appeals to families, aligning with the library's broader scope of lending resources beyond books.

Future considerations include expanding borrowing options to include indoor air quality monitoring kits, enabling residents to assess local air quality impacts, particularly during wildfires.

What is needed to make further progress:

One notable challenge encountered throughout the program's implementation has been the difficulty in establishing a clear correlation between participant engagement and actual reductions in greenhouse gas emissions through tangible home energy improvements. Although an optional survey was provided to participants in the first year, reintroducing this survey formally may be necessary moving forward to address this gap. The potential need for external funding to sustain the program in the long term underscores the importance of demonstrating measurable energy reductions in homes to funding partners, many of whom did not continue financing beyond the initial year due to this uncertainty.

From a technological and accessibility standpoint, the cameras are compatible with smartphones, including both iPhones and Androids. However, the evolving nature of device ports may necessitate periodic updates to the cameras. Additionally, the effectiveness of the cameras is most pronounced during extreme weather conditions, such as the peak of summer or the depths of winter. During milder seasons, when heating and cooling systems are less active, the cameras may yield misleading readings, potentially leading users to overestimate their home's efficiency. Hence, it is important to provide clear guidance on the appropriate usage of the cameras and ensure effective servicing during these periods.

How progress is being tracked:

The primary focus was on program participation, yet the City has enlisted a third-party service provider for the Home Energy Navigator initiative. Acknowledging that the retrofit process can be complex, having a guide person available to assist individuals has been deemed beneficial. This free service aids participants in understanding the necessary steps, tracking their progress, and clarifying next steps. The interest shown in the "See the Heat!" program suggests that this initiative could effectively engage participants in further stages of the retrofit journey.

Advice to cities seeking to replicate this initiative:

City staff recommend that other municipalities begin by assessing their implementation capacity. In smaller communities, it may be feasible to run the program in-house if only a few participants per month are anticipated. However, for mid-size to larger communities where there is potential for hundreds of requests, dedicated staff or a key collaborator, such as a library, may be necessary. It is crucial for cities to establish clear objectives for the program, which may need to include quantifiable methods of impact measurement beyond participation if key funders require it. The city must fully commit to purchasing the cameras upfront, designate personnel to plan and execute purchase orders, determine quantities needed, and allocate a budget for ongoing camera purchases.

Moreover, these cameras should serve dual purposes as thermal imagers and kilowatt meters, providing insight into home appliance energy usage. Packaged with draft-proofing kits and instructions, they form a comprehensive Home Energy Kit. Offering a complete lending program with instructional materials enhances active participation.

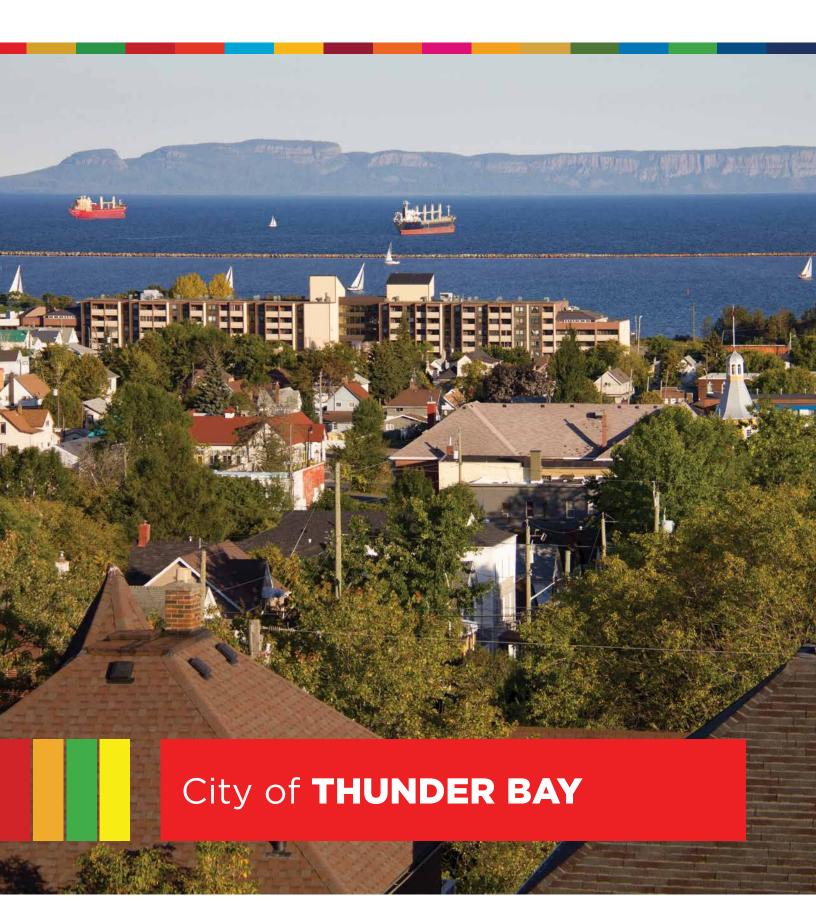
Further information:

https://www.kelowna.ca/sites/files/1/docs/cok_12903_see_the_heat_brochure_11x8.5_final_0.pdf

https://www.orl.bc.ca/whats-happening/whats-new/news/2020/02/04/see-the-heat

https://www.pentictonwesternnews.com/news/kelowna-partners-with-fortisbc-to-increase-energy-efficiency-in-the-home-3592929

https://www.cbc.ca/news/canada/british-columbia/okanagan-kelowna-library-loan-camera-energy-efficiency-1.5453758



Sustainable Culture

CITY OF THUNDER BAY



Name of City: Thunder Bay

Name of Initiative: Stormwater Management Plan

UMF Attribute:Sustainable
Culture

Global Urban Monitoring Framework (UMF) Indicator:

4.4.2 Climate Adaptation and Resilience

#60 Climate adaptation and resilience.

Culture 2030/UNESCO 3: Aims to assess measures taken to foster climate change mitigation and adaptation and enhance resilience through sustainable safeguarding and management of tangible and intangible cultural heritage as well as natural heritage.

SDG Target 11.b:-By 2020, substantially increase the number of cities and human settlements adopting and implementing integrated policies and plans towards inclusion, resource efficiency, mitigation and adaptation to climate change, resilience to disasters, and develop and implement, in line with the Sendai Framework for Disaster Risk Reduction 2015-2030, holistic disaster risk management at all levels.

SDG Target: 6.3: Improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated water and substantially increasing recycling and safe reuse globally.

SDG Target 6.6: Protect and restore water-related ecosystems, including mountains, forests, wetlands, rivers, aquifers and lakes.



Summary:

The Stormwater Management Plan (SMP) constitutes a strategic directive spanning 20 years, aimed at enhancing the City's existing infrastructure and safeguarding water resources. This plan takes into account the impact of environmental changes, land use patterns, and climate variability on stormwater dynamics, while also addressing the exacerbation of chemical runoff due to reduced absorbency of the urban environment as a result of paved or other hard surfaces. Its primary objective is to mitigate the risks associated with runoff and safeguard the integrity of roads and other physical infrastructure through the establishment of a fully operational stormwater conveyance and treatment system.

Thunder Bay's strategy encompasses various measures to address urban run-off and the storm-sewer system within the context of the whole water cycle. This approach includes capital works projects, the adoption of Low Impact Development (LID) techniques such as Green Infrastructure, and the formulation of supportive City by-laws. Multiple municipal divisions collaborate to achieve targeted objectives with a focus on preserving and enhancing the ecological health and quality of the City's water resources. Moreover, the plan delineates specific provisions for stormwater maintenance, data monitoring, as well as the regulation and enforcement of development and redevelopment-related bylaws.

The City's broader objectives encompass educational outreach initiatives aimed at fostering stewardship of water resources among residents, businesses, and institutions. These efforts also aim to bolster funding mechanisms and implement climate change adaptation measures, with stormwater adaptation strategies serving to engender long-term savings and resilience for the City's future.

Through its Stormwater Management Plan, Thunder Bay is addressing SDG Target 11.b to integrate policies and plans to adapt to climate change and Urban Monitoring Framework (UMF) indicator measuring policy effort in relation to climate adaptation and resilience. The holistic approach also addresses SDG Target 6.3 to improve water quality by reducing pollution and SDG Target 6.6 to protect and restore water related ecosystems.

Factors contributing to its creation:

The impetus for the City's efforts to improve stormwater infrastructure arises from the urban expansion phenomenon. As urban areas expand, the proliferation of impermeable surfaces diminishes the natural capacity for excess water to infiltrate the soil and replenish water bodies such as streams, lakes, wetlands, and aquifers. Consequently, water rapidly drains into storm sewers and conveyance systems, carrying elevated levels of pollutants such as oil, sediment, chemicals, and debris, which ultimately contaminate surrounding lakes and rivers.

The groundwork for the SMP commenced in 2011 with a scoping study evaluating the Thunder Bay watershed system and the City's approach to stormwater management amidst climate impacts. This study revealed shortcomings in addressing both the quality and quantity of stormwater. Consequently, a recommendation emerged to undertake a comprehensive citywide stormwater management plan, which culminated in its completion in 2016.

Concurrently, a study of McVicar Creek, which was identified as a "stressed" urban watershed, was conducted in 2014. The City explored the feasibility of scaling the findings from this study across the City's entire urban watershed system and determined its applicability. Thus, insights from the initial study were integrated into the broader city-wide Stormwater Management Plan. A total of 27 opportunity sites for stormwater quantity and quality improvements were initially identified for McVicar Creek, with an additional 525 identified for the entire City watershed through the SMP. These improvements encompass various stormwater enhancements and nature-based solutions aimed at water treatment and retention, including ponds and infiltration systems such as bio-swales, and are separate from other stormwater conveyance and storm sewer capacity improvements.

While the decision to launch the Stormwater Management Plan predates the May 2012 flood that prompted a state of emergency in Tunder Bay, it underscored the pressing issues discussed within the community. Additionally, two flooding incidents occurred in the spring and fall of 2016, coinciding with the completion of the Plan.

Prior to 2012, Thunder Bay had only 12 City owned stormwater management facilities, such as ponds and infrastructure for retention and treatment within its watershed. City staff recognized the advantage of initiating the SMP later than many other communities, allowing them to glean insights from the experiences of other cities, and has since increased its complement to 81 City owned stormwater management facilities as of the end of 2022.

Resource requirements for implementation:

There were two main requirements for implementation: funding and staff resources. Firstly, funding had to be consistent and forecastable to achieve the long-term planning security

required for implementation. Current funding comes from the general Property Tax Levy; Sewage and Drainage Tax Levy (which only applies to urban areas); a portion of water and sewer bills (which only applies to urban areas); and provincial and federal program funding, including funding for climate adaptation and disaster mitigation. As the Stormwater Management Plan identified the costs and benefits of the 525 facilities improvements, it facilitated, supported and rationalized the case for further funding applications.

Secondly, staff resources were a crucial aspect, particularly with regard to role of internal champions in achieving Council approval. Thunder Bay is a small community without a dedicated stormwater division; therefore, the SMP was moved forward by staff whose contributions are in addition to their other standard duties.

What is working well:

The SMP has benefited from extensive and continued support by the community and non-profit organizations, such as the local conservation authority who participated in its implementation. Thunder Bay EarthCare is a branch of the City's operations that has led the Climate Adaptation Plan and leads public working groups comprising local volunteers and staff who collaborate together. The Water Working Group, for example, includes representatives from various agencies such as the Ontario Provincial Ministry of Environment, Conservation and Parks (Thunder Bay is located in the Province of Ontario) and local fisheries groups. Public participation also ensures the core messaging refrains from being overly technical and remains understandable to residents. It is very important that the City actively keeps the messaging consistent and persistent, not only during crisis events such as flooding, but year-round. This helps to retain stormwater management at the forefront of discussion. Additionally, the City has adopted a holistic approach that not only explores what the City can do, but also supports residents to pursue changes to their private properties to improve stormwater management. For example, residents are actively building rain-gardens and installing rain-barrels, which are subsidized by the City. The public has an important role to play in achieving watershed-wide system improvements.

What is needed to make further progress:

After the SMP was approved, the next step was to initiate various policy changes to ensure its implementation. It's crucial not to lose the momentum gained from creating and discussing a plan in order to avoid it becoming just another report sitting on a shelf. Keeping it at the forefront of City staff's workload, raising it in discussions, especially with City Council and the public, is vital. A method the City employs is broadcasting "eco-minute" videos. Successfully securing third-party funding ensures that work is completed within the funding schedule's deadlines, which proves invaluable when staff time is scarce and needed for competing objectives.

How progress is being tracked:

Progress is tracked and communicated to Council through an annual Climate Adaptation Report as well as through an annual Wastewater Report. The statistics included in these reports detail how many facilities are being built, the total drainage area being managed, the total run-off volume being treated, and other extensive engineering statistics. Furthermore, there is an inhouse, online data base that is used to track all projects, inspections, and condition assessments. The City aspires to eventually showcase this online for the public as a watershed map that is clickable with various data points. Graphic stormwater signs explain to the public what is happening in the ponds and raingardens so Thunder Bay's residents are aware of why these facilities are there, what they do, and the benefits they provide. The City has posted eight weather resistant signs, all of which are branded with the similar looking sight-specific notes for each facility and for the specific watershed.

Advice to cities seeking to replicate this initiative:

The City's primary recommendation is to avoid framing this initiative solely in response to a flood event. Instead, it should be portrayed as an enduring movement supported by active public engagement and endorsement. Lack of public support could lead to resistance, highlighting the importance of proactive measures. City staff need to acknowledge the significance of both construction capital and ongoing maintenance funding, ensuring their sustainability over the long term. While it's tempting to find excuses to oppose stormwater management or delay progress, even small steps can yield significant benefits for the natural environment.

Further information:

https://www.thunderbay.ca/en/city-services/resources/Documents/SMP-Presentation-to-Council-May-2016-Accessible.pdf

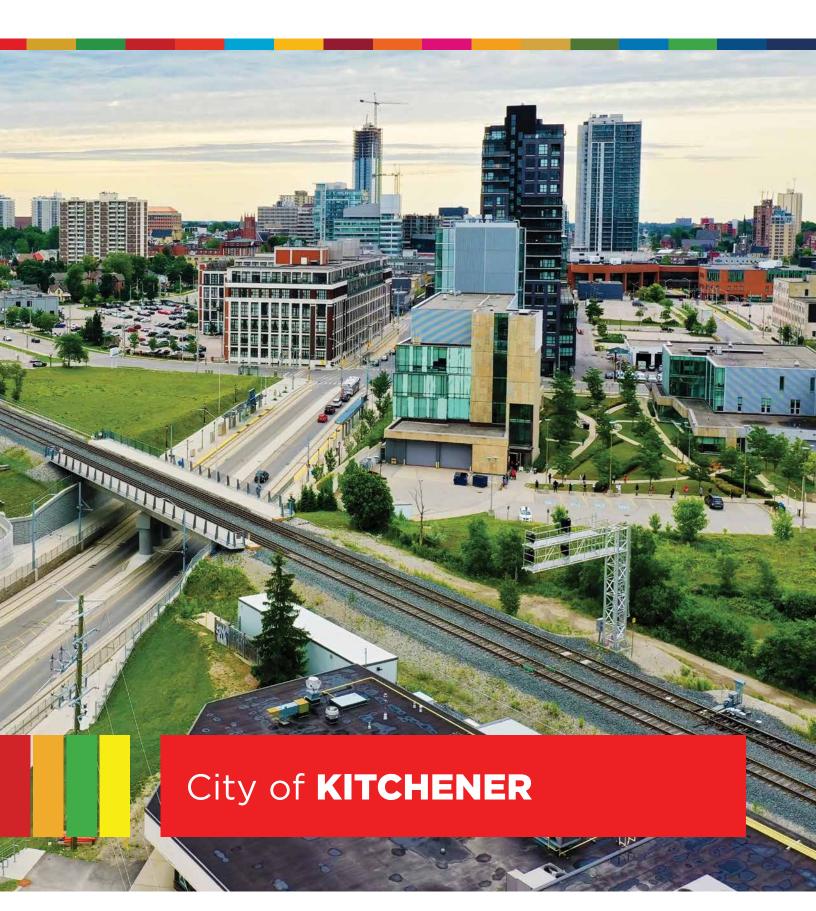
https://www.thunderbay.ca/en/city-services/resources/Documents/Stormwater-Management-Plan-for-web---Vol1-Accessible.pdf

thunderbay.ca/en/city-services/resources/Documents/Stormwater-Management-Plan-for-web---Vol2-Accessible.pdf

https://www.thunderbay.ca/en/city-services/resources/Documents/Stormwater-Management-Financing-Study---storyboard.pdf.

https://www.thunderbay.ca/en/city-hall/resources/Documents/McVicar-Creek-Protection-and-Rehabilitation-Plan-Accessible.pdf





4.5 Governance and Implementation

Inclusive Governance and Implementation

CITY OF KITCHENER



Name of City: Kitchener

Name of Initiative: SDG Aligned and Participatory Strategic Planning

(Kitchener Strategic Plan 2019-2022 and 2023-2026, plus Engage Kitchener)

UMF Attribute: Inclusive Governance and Implementation

Global Urban Monitoring Framework (UMF) Indicator:

5.2.1 Direct Participation Structure of Civil Society in Urban Planning and Management

#67 Presence of direct participation structure of civil society in urban planning and management that operate regularly and democratically

SDG Target 11.3: By 2030, enhance inclusive and sustainable urbanization and capacity for participatory, integrated and sustainable human settlement planning and management in all countries.



Summary:

Kitchener's Strategic Plan is focused on providing accountability and transparency and pursues an innovative, caring, and vibrant future for the city. Both the 2019-2022 and the recently released 2023-2026 Strategic Plans reference and explicitly align the City's priority actions with the 17 UN Sustainable Development Goals. The City also provides ongoing engagement opportunities for residents, including an innovative online participation mechanism called "Engage Kitchener." The 2023-2026 plan was developed over the course of a year with feedback collected through a telephone survey of over 1,000 residents, street team interviews, extensive online engagement, focus groups, and notably, a 'Plan WITH Us' panel of 36 diverse volunteers was formed, all for the purpose of gathering valuable insights for the Strategic Plan. Kitchener used its existing "Engage Kitchener" platform to provide even wider opportunities for online engagement to develop the plan, on a digital consultation management website that is shared with neighbouring municipalities in the Waterloo Region. This level of active public engagement and listening to what residents expect has proven important in identifying priorities and actions that residents want from their municipal government.

The previous 2019-2022 plan identified five core goals to pursue opportunities sourced directly from local engagement, including i) people friendly transportation, ii) environmental leadership, iii) a vibrant economy, iv) caring community, and v) great customer service. To elevate these goals, the City's staff formulated 25 action statements to pursue with five specifically dedicated to each of the distinct goals. Each of the action statements speak to ambitious City projects by developing new infrastructure, programs, funds, and mobilizing future plans. Branching out from this plan, the City has already developed a new plan to continue pursing an updated set of goals for 2023-2026 and a community vision which

extends the City's planning horizon to 2043. Strategic priorities include building a connected, green, economically thriving, caring and well administered city. To maintain engagement and transparency, the City of Kitchener makes information on each of the actions available, informing residents on the progress of each target and whether it is on budget.

The Plan recognizes the UN Sustainable Development Goals (SDGs), and internally, staff has directly linked each of the action statements to at least one of the SDG targets, as applicable and relevant to their work. They have expressed intention to contribute to the success of the SDGs within their local role of delivering direct services and programs, and measuring annual performance toward a set of key progress indicators.

Kitchener's plans and public engagement efforts demonstrate alignment with SDG Target 11.3 enhance sustainable and inclusive urbanization and Urban Monitoring Framework (UMF) indicator #67 measuring the direct participation of civil society in municipal planning.

Factors contributing to its creation:

The City's practice of developing a four-year strategic plan has been an ongoing practice for over twenty years. The most recent plan aligns with the values of the City's new Council and represents the core ideals they envision implementing. This process begins with the active engagement of the community, and within the 2019-2022 plan the City introduced alignment with the SDGs and finding ways to take local action in support of them.

Resource requirements for implementation:

Effectively budgeting resources and managing staff workloads are both necessary to create and implement the plan successfully. The City also benefitted from money received in grants which it invested in prominent City projects. Through their efforts in planning and application, many of the projects have been successfully implemented. The work is still ongoing to complete a few remaining initiatives.

What is working well:

The strategy has proven successful through the skills of City staff to implement new plans, alongside the continued support of the Corporate Leadership Team, comprising the Chief Administrative Officer and five department heads. Both aspects together provide support and accountability. An officially affiliated community volunteer committee called Compass Kitchener serves in both an advisory capacity and reviews all progress reports annually. This committee has been in place for 20 years, remaining an important resource for as long as the strategic planning cycle. The Strategic Plan, informed by the SDGs, was instrumental in providing resilience during the covid pandemic. For example, The Housing for All Strategy and the Make it Kitchener Economic Strategy – actions within the Strategic Plan - were able to pivot and provide focus to key emergent issues in the early stages of the pandemic.

What is needed to make further progress:

During the pandemic's unforeseen circumstances, progress on many of the projects was paused, and City staff struggled with a high work load and the need to constantly pivot and refocus their efforts. Staff were stretched too thin to complete all actions from this planning cycle, with incomplete actions regarding economic development. However, their work remains ongoing despite disruptions of the pandemic and there is a commitment to conclude and report publicly and to Council on these actions.

How progress is being tracked:

Progress is consistently tracked three times per year, with City staff posting status updates on their website for the public, after sharing with Council. Their main reporting focus is whether the determined actions are being completed and what progress is being made. In the 2019 report, the actions were not fully aligned with the SDGs; however, for the 2023-26 planning cycle all five goal areas will have evident links to the SDGs. Moving forward, this will be tracked with three to four indicators that will directly measure progress both on actions and the SDGs. The shift in progress tracking takes a stronger initiative to follow and champion the SDGs.

Advice to cities seeking to replicate this initiative:

Cities looking to replicate this initiative would find it helpful to establish a set of indicators and gather baseline data up front to clarify the specific goals they want to achieve. It is then important to explore desired outcomes first and use that to inform what actions to take. Additionally, cities should look at what meaningful outcomes have resulted from previous strategic plans to identify new opportunities and incorporate useful strategies and tools. For example, shifting out of the pandemic, the community recognized the importance of inclusivity. "Fostering a Caring City" is a theme in the new plan that measures a sense of belonging. Statistics Canada helpfully reports on this, every two years, so the City is able to look at what is being tracked at a national level, and localize the outputs for Kitchener.

Further information:

https://www.kitchener.ca/en/strategic-plans-and-projects/strategic-plan-and-business-plan.aspx

https://www.kitchener.ca/en/resourcesGeneral/Documents/COR_CAO_Kitcheners_ Strategic Plan.pdf

https://www.kitchener.ca/en/resourcesGeneral/Documents/CAO_2023-2026_Strategic_ Plan.pdf

https://www.engagewr.ca/hub-page/kitchener

https://www.kitchener.ca/en/strategic-plans-and-projects/2019-2022-strategic-plan-progress.aspx



CITY OF BURLINGTON



Name of City: Burlington

Name of Initiative: Code of Good Governance

UMF Attribute: Inclusive Governance and Implementation

Global Urban Monitoring Framework (UMF) Indicator:

5.2.1 Direct Participation Structure of Civil Society in Urban Planning and Management

#67 Presence of direct participation structure of civil society in urban planning and management that operate regularly and democratically

SDG Target 11.3: By 2030, enhance inclusive and sustainable urbanization and capacity for participatory, integrated and sustainable human settlement planning and management in all countries.

SDG Target 16.6: Develop effective, accountable and transparent institutions at all levels.



Summary:

The City of Burlington has implemented a *Code of Good Governance* to set clear expectations and guidance for members of City Council. The Code articulates expectations of council regarding the conduct of duties, governs council behaviour, provides clarity on expected behaviour to the public, and establishes response mechanisms to alleged breaches of conduct. An *Integrity Commissioner* guides the framework and pursues inquiries regarding accountability. The Code defines 'aspirational commitments' as values that are not subject to a formal complaint, such as maintaining a long-term view of the inter-generational impact of policies and programs, holding staff accountable for effective delivery of goals, and working collaboratively for better governance. These 'aspirational commitments' differ from 'conduct commitments', which are subject to a formal complaint. The conduct commitments are an extensive list, ranging from avoiding perceived or actual conflicts of interests; abstaining from managing funding received by charities, non-profits, or community groups; and taking full responsibility for the content of official social media presence. Breaches of the eleven conduct commitments can be submitted as a formal complaint to the Integrity Commissioner at any time, encouraging a straightforward path for the public to hold elected officials accountable.

Burlington's Code of Good Governance addresses SDG Target 11.3 to enhance inclusive and sustainable urbanization, SDG Target 16.6 develop accountable institutions, and Urban Monitoring Framework (UMF) indicator direct participation structure of civil society.

Factors contributing to its creation:

The staff has overseen the initial stages of developing a Code of Good Governance, taking the baton from former employees who initiated the project. In response to a 2018 report from the City Manager's Office, the team conducted a thorough review of the initial findings to pinpoint the essential reasons that necessitated the original Code of Good Governance. Driven by a commitment to achieving exemplary outcomes in collective conduct, the process gained momentum. Acknowledging the presence of an outdated code of conduct, the shift in approach provided a prime opportunity to modernize, enhance, and offer renewed guidance.

Resource requirements for implementation:

The implementation of the Code necessitates self-regulation. Accompanying the Code, an appendix provides detailed guidelines on implementation, which includes procedures for handling both formal and informal grievances. An Integrity Commissioner has been engaged on a retainer basis to guarantee accessible channels for individuals to lodge complaints—which may pertain to a council member—or to obtain clarification on what constitutes a valid complaint. The purpose of the retainer agreement is to preserve an objective distance from the city's internal operations, while securing the professional insight necessary to discern potential conduct violations.

What is working well:

Determining the precise indicators of success can be challenging. However, the fact that the system is operational and effective to date suggests its efficacy and necessity. It establishes clear benchmarks for good governance and fosters a culture of accountability.

What is needed to make further progress:

Continued access to the Integrity Commissioner is absolutely necessary. The Code is not and should not be static. It does require revision or at least review to ensure that what is covered remains relevant. It should be subject to regular review, which was initially due in 2022; however, the Covid-19 pandemic has slowed progress.

How progress is being tracked:

Progress is tracked on an annual basis, and a summary report is prepared by the Integrity Commissioner. In addition, for every formal complaint that leads to an investigation, an outcome report is also prepared and issued.

Advice to cities seeking to replicate this initiative:

Burlington staff conducted extensive research, exploring how other cities managed this issue. What is important to consider first are the guiding principles that articulate what the city is trying to achieve and how those principles should guide decision-making. Staff worked with Council to identify and develop these principles, with the whole initiative completed in-house.

The City of Burlington is located in the Province of Ontario, and its Municipal Act includes policy addressing conflicts of interest. Similarly, most municipalities in Canada already have provisions for guiding behaviour in governance; however, the definition of 'conflict of interest' in the Municipal Act is very specific. The Burlington Code of Good Governance broadens the scope to provide overall guidance on the delivery of good governance by City Council.

Further information:

https://www.burlington.ca/en/council-and-city-administration/resources/Corporate-Policies/Code-of-Good-Governance.pdf

https://www.burlington.ca/en/council-and-city-administration/integrity-commissioner.aspx





Resilient Governance and Implementation

TOWN OF GIBSONS



Name of City: Town of Gibsons

Name of Initiative: Asset Management Strategy

UMF Attribute:Resilient
Governance and
Implementation

UMF Indicator:

5.3.1 Own Source Revenue

#72 Own source revenue as percentage of the total city revenue.

CPI Municipal Finance and Institutional Capacity - Own Revenue Collection: A prosperous city seeks to generate its own revenue and reduce dependence on government transfers.

SDG Target 15.1: By 2020, ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains and drylands.

SDG Target 15.9: Integrate ecosystem and biodiversity values into national and local planning, development processes, poverty reduction strategies and accounts.



Summary:

The Town of Gibsons has developed a "comprehensive" Asset Management Strategy for making strategic and operations decisions regarding municipal assets over their life cycle. This involves a holistic approach to service delivery that integrates engineered assets, such as roads and pipes, with natural assets, such as ponds and aquifers. They define natural assets as all natural resources and ecosystems that provide municipal services, in comparison to costly physical infrastructure that takes on the same task. The crucial feature of their innovative strategy is having financial plans in place to ensure that all assets are effectively maintained, repaired, replaced, or regenerated. This process helps manage aging infrastructure as replacement costs continue to increase and builds resilience through development of robust ecosystems. The Town aims to develop a step-by-step management strategy that cities across the world can easily adopt.

The advantages of natural over engineered assets are the ecosystem services they provide. They are cheaper to operate and maintain and, as an asset, they do not depreciate if properly managed. They are usually carbon neutral or even net positive. The Town's entire network of natural assets including the soil, air, water, and flora, provide valuable goods and essential civil services, including erosion control, air purification, filtering rainwater runoff, and providing drinking water. The Town's objectives in valuing natural assets are understanding what services are gained through them, reducing costs of services, managing risks, and maintaining healthy ecosystems by ensuring their effective protection from degradation and availability to service future development.

For example, stormwater from development in the Upper Gibsons area flows into Charman Creek via White Tower Park's natural settling ponds, which cleanse and filter it, before

reaching the ocean. Without these vital functions, downstream flooding may force a halt to Upper Gibsons development or require costly engineered infrastructure, estimated at \$4 million, to manage. Through taking a comprehensive approach to asset management, the Town has shifted natural assets from the periphery of municipal decision-making to the core, with bylaws in place to protect them, financial planning to account for them, and government departments now working together more effectively to maintain them.

The strategy addresses SDG 15.1 and 15.9 related to ensuring conservation and integrating ecosystem values into local plans, and the Urban Monitoring Framework indicator for land under protected natural areas as referenced by the *New Urban Agenda* through *establishing* and managing protected areas as part of the planning process.

Factors contributing to its creation:

The context of the creation of the strategy begins in 2013 when Gibsons, like many communities, was facing infrastructure depreciating at a rate faster than it could be replaced. Simultaneously, the disposition of the community was highly attuned to its spectacular natural setting, which engendered expectations to protect the environment. The Town's most vital natural asset is the aquifer from which they draw their water, a report on which had recently been published. The focus at that time was primarily on renewable energy and GHG emissions mitigation rather than climate adaptation. Town staff were in the midst of a polarized debate divided along pro-development or pro-conservation lines. Therefore, Gibsons sought to strike a balance that enabled ecological restoration while simultaneously supporting development. Valuing natural assets as part of a comprehensive asset management strategy created a conceptual space that both parts of the community could come together on.

Resource requirements for implementation:

Political will is the most critical resource. In the case of Gibsons, staff successfully requested Council to consider revising the Town's formal definition of infrastructure to recognize nature as fundamental to achieving municipal management objectives. Once adopted, the Asset Management Strategy prompted a realization that rather than managing individual pieces of infrastructure, staff was managing inter-connected human and nature-based systems. To implement this new approach, the Town slowly increased staffing one-by-one without increasing their overall operating resources— they simply changed their approach. The Town also engaged The David Suzuki Foundation as evaluators, as well as the Smart Prosperity Institute from The University of Ottawa, to provide insight and policy recommendations to support the evaluation.

What is working well:

The creation of two teams is working well, the Risk Management Team and Resource Management Team (Natural Resources). There is also a Planning Team that manages the infrastructure and links it with the Official Community Plan. The Town invested in people and in technology, shifting away from paper to iPads for example. At the community level, staff worked with an artist group to produce a series of art installations to help the community connect with the natural assets. Informational guides were published on the Town's website. All programming was multi-generational and multimedia, with videos and art installations prepared by the community using everyday non-bureaucratic language.

Another thing that is working well is the positive impact on operating costs. The Town's objective was to have the most natural, energy efficient infrastructure, and the program has yielded several examples where costs have been reduced, while increasing resilience to flooding. The Town is now in the positive cycle of the progressive restoration of their natural

assets. The overall area for natural assets remains the same, but their condition is evidently improving. There are higher water levels in the aquifer, in some areas the foreshore has been restored, and work is now directed towards restoring urban creeks.

Regarding the SDG Goal #15 - 'Life on Land', the Town is well-versed in practicing an environmental restoration approach. Faculty at the University of Calgary were engaged to help build the connection to the SDG goals which built confidence that the Town was moving forward on the right path.

The Town has received awards for excellence in asset management. While many cities are primarily focused on emissions reduction, it is important to note that natural asset management is to climate adaptation as what mitigation is to climate stabilization. Gibsons is building a resilience model, which is more complex than simply planting trees or installing renewable energy. They have concluded that cities need to take a comprehensive, systemic approach to their infrastructure asset management. There are important co-benefits, such as from the insurance perspective, in terms of increased capacity to recover from natural disasters and hazardous events. As well, the Government of the Province of British Columbia, where Gibsons is located, recognizes natural asset management as an important climate adaptation practice and essential for resilience.

What is needed to make further progress:

The Town of Gibsons recognizes that their ecological boundary is different from their political boundary. As such, Gibsons is pursuing a Water Sustainability Plan alongside the provincial government and First Nations to address challenges of land- and water-use decision-making for watershed health and collaborative government to government agreements. For example, this would entail expanding Gibsons' monitoring network for ongoing data collection onto surrounding jurisdictions.

Professional capacity for planning, engineering, as well as financial planning and risk management continues to be another barrier to further progress. The Province of British Columbia, in which the Town of Gibsons is located has made progress in providing guidance on this matter; however local governments need to be proactive and ask questions explicitly about this. For example, most engineers are more comfortable certifying and validating a specific pipe rather than a natural filtration and drainage system. Consequently, finding an engineering firm to work within this natural asset approach is more difficult to facilitate. As well, staff have pointed out that public sector accounting standards could be improved through provisions to formally recognize the value of natural assets in financial reporting. In Gibsons, funding has been less of an issue; it is shifting perspectives that has proven most challenging.

How progress is being tracked:

Gibsons is tracking progress through an extended monitoring network. In 2012 they conducted a baseline assessment of the aquifer and then implemented protections from drilling, efforts aimed at reducing water demand, and measures for protecting the surrounding aquifer recharge area. A repeat assessment in 2021 highlighted an improvement in aquifer water levels and a reduction in the frequency of flooding in specific creeks that were known to do so often since the 1960s.

Staff observe that natural conveyance of water upstream, through ponds and creeks, dissipates the intensity of stormwater flows, providing effective mitigation against potential overflows downstream. Another metric being tracked is improving water service reliability, with the goal

of providing high-quality water at adequate levels year-round to residents through ongoing service, even as risks of disruptions increase.

Advice to cities seeking to replicate this initiative:

Gibsons' staff believe that to replicate this initiative, political leadership that recognizes the value of natural assets as part of a municipality's total infrastructure system is necessary. The next steps are to conduct a basic inventory to establish the baseline state to understand what is already in place and how to work with their natural assets, and then develop and implement a natural asset management plan. Through doing this, Gibsons found it invaluable to build community awareness and professional awareness among staff about the importance of protecting natural assets. People need first to be made aware of the role that natural assets play, as water starts in the creeks and watersheds, not in the treatment facility.

Often natural assets are viewed as an optional program to pursue after deferred maintenance is addressed, but they should be a starting point. There is always a limit on the rate of innovation in accounting standards, but every community should start by identifying, recognizing, and acknowledging the natural assets in their financial statements by creating a list of what they are and inventorying them.

Further information:

https://gibsons.ca/sustainability/natural-assets/

https://gibsons.ca/wp-content/uploads/2019/08/2019-Asset-Management-Program-Overview_finalcombined.pdf

https://gibsons.ca/wp-content/uploads/2018/01/GibsonsFinancialPlanningReportJan2018-PRINT.pdf





Sustainable Governance and Implementation

CITY OF WINNIPEG



Name of City: City of Winnipeg

Name of Initiative: OurWinnipeg 2045

UMF Attribute: Sustainable Governance

UMF Indicator:

5.4.2 National Urban Policies/Regional Development Plans

#76 Presence of urban policies or regional development plans that: (a) respond to population dynamics, (b) ensure balanced territorial development, (c) increase local fiscal space.

SDG Target 11.a: Support positive economic, social and environmental links between urban, peri-urban and rural areas by strengthening national and regional development planning.



Summary:

The OurWinnipeg 2045 development plan has centered its objectives and policy directions around the UN Sustainable Development Goals. It consists of 21 objectives and 137 policy statements along with recent Council adopted strategies and plans to align with it such as: Winnipeg Transit Master Plan, Poverty Reduction Strategy, and the Community Energy Investment Roadmap.

Our Winnipeg 2045 actively localizes the SDGs into six key municipal goals, which together incorporate all 17 SDGs into the City's future. The key goals are: 1. Leadership and Good Governance; 2. Environmental Resilience; 3. Economic Prosperity; 4. Good Health and Well-Being; 5. Social Equity; and 6. City Building. Each of the goals has three to five core objectives. Our Winnipeg 2045 is formulated to serve as a lens to analyze and evaluate community needs to best prioritize City services. The City believes that by aspiring to achieve the internationally recognized Sustainable Development Goals and developing its action plan on community-based solutions, coordinated partnerships, and responsive service delivery that it will empower itself as a thriving, sustainable, and resilient city. Through this initiative, the City further commits itself to human rights in action as well as in principles to realize equitable and high quality of life for all residents.

The OurWinnipeg 2045 development plan addresses SDG Target 11.a. supporting positive links between urban, peri-urban and rural areas and Urban Monitoring Framework (UMF) indicator on urban policies and regional development plans.

Factors contributing to its creation:

OurWinnipeg 2045 is a development plan bylaw that is required for all municipalities by the government of province of Manitoba, within which Winnipeg is located. However, it is broader in scope than a classic land use development strategy. Upon reflection of the success of the 2011 OurWinnipeg Plan, it was determined that more clarity and resources were needed to effectively measure progress and the outcomes quantitatively. For the 2045 plan, the City searched for a larger framework with embedded principles and better-defined goals, and staff connected with various community groups, culminating in agreement that the UN SDGs represented a reliable and useful starting point. Once the City conducted the background research, staff localized the 17 goals to the six presented in OurWinnipeg 2045 through a process of engagement and policy co-creation with community groups, including the United Way Winnipeg and the Winnipeg Chamber of Commerce. The City also undertook an internal review to confirm alignment for effective service delivery.

Many aspects of the goals exist within multiple agencies across multiple levels of government, such as health, which is a provincial government responsibility. However, there are also built and natural environment priorities that the City is responsible for that promote health. This diversity allows the Our Winnipeg 2045 plan to serve as a dynamic method to engage with multiple stakeholders by including various areas in which, previously, the City and its other government counterparts were less collaboratively engaged.

Resource requirements for implementation:

An important part of OurWinnipeg implementation was recognition for the need for a Strategic Priorities Action Plan and coordination at the political level to guide public services action in specific policy areas. Council identified a total of 42 priority actions. The multi-year, balanced budget process will identify resources to support these actions. Human capital is a scarce resource upon which a great deal of inter-departmental collaboration is based. Ultimately, this realization helped in identifying what was necessary through policy shifts to actively pursue the work. The planning stage was extensive, and the document has been with the Planning Department for a five-year review process that is currently in place. Additionally, staff champions were valuable to mobilize the Strategic Priorities Action Plan; staff could manage to keep the policies and the Plan itself within Council's priorities. An important issue was managing competing interests to resolve issues that overlap mandates, and are interconnected and complex, for example considering how to best mitigate and adapt to climate change. A key takeaway is that more structured planning ensures that policies that are developed are also followed through in implementation and integrated into administrative structures. An important theme throughout Winnipeg's case is alignment at different scales of implementation and within the City organization. There are the global SDGs, to which the Government of Canada has committed. Therefore, Winnipeg's alignment can also contribute to national and global goals through access to resources, policy alignment, and implementation.

What is working well:

A significant focus was placed on relationship and trust-building that has contributed greatly to moving the plan forward. The City has benefited through engagement of its community networks as well as a community advisory committee who reviewed the alignment to the SDG framework. Anchor Institutions also helped expand local engagement through their respected and broad networks. There are eleven Anchor Institutions who had the opportunity to review policy drafts and provide feedback. The Indigenous Relations Division staff supported capacity building and policy development to centre reconciliation within the OurWinnipeg initiative. For example, a policy was created to further engagement with urban Indigenous communities to develop and apply an Indigenous-focused lens to City governance processes, policies and programs. Building relationships in community and interdepartmentally eased moving the initiative forward through Council's adoption and subsequently through the ongoing implementation process.

What is needed to make further progress:

The implementation process has seen challenges as it is difficult to change individual and institutional worldviews. These present complex and messy challenges while all parties and individual teams struggle against scarce resources and competing issues. Actively reducing silos and maintaining relationships, trust and accountability is crucial to progress. Our Winnipeg is a high-level document; therefore, City staff continue to unpack its implications in the daily operations of the City and Council direction that is affected by day-to-day circumstances. Policy alignment is a critical piece, and oftentimes it is difficult to gauge how to achieve this with meaningful change. An incremental and dedicated approach is underway.

How progress is being tracked:

OurWinnipeg 2045 employs many of the *PEG Community Indicators* to track progress and created a preliminary set of indicators in Appendix 2. PEG is produced through a collaboration between the United Way in Winnipeg in partnership with the International Institute for Sustainable Development (*IISD*). In May 2023, Council approved the Council Strategic Priorities Action Plan, which was recognized by OurWinnipeg 2045 as a key tool for ongoing action guidance. By September, a formal reporting framework was adopted, with multi-year funding scheduled for early 2024 approval. Although the reporting framework has been adopted by Council, the assignment of corresponding action output indicators must await the approval of the multi-year budget. Fourteen community impact indicators, correlating with the Council's five priority themes, have been identified for the Council's Strategic Priorities Action Plan for the years 2023-2026.

Advice to cities seeking to replicate this initiative:

To replicate this style of plan or institutional change, it is very important to understand how a city works, particularly in regard to power dynamics, and the structural and systems changes required. This includes understanding how to shift power to equity groups. A portion of this happens through co-creating to amplify the voices of these groups to identify what they specifically need. Planners critically considered and created policy space to integrate reconciliation with Indigenous Peoples into municipal responsibilities; however, the details of how to do this will require ongoing work with Indigenous leaders to decolonize in a truly deep, systemic change-oriented manner. The City examined social equity ideals and can work to expand understanding and pursue change towards social justice. Building the foundation and support for systems change is important. It is often a challenging and a slow process, especially for a large organization with over 10,000 people; but, it can contribute to a lasting and meaningful change when thoughtfully pursued.

For further information:

https://www.winnipeg.ca/building-development/city-planning-design/ourwinnipeg/ourwinnipeg-2045

https://www.mvpeg.ca/

https://clkapps.winnipeg.ca/DMIS/DocExt/ViewDoc.asp?DocumentTypeId=1&DocId=8222



5.0 Network Profiles



While individual municipalities across Canada are pursuing positive and innovative approaches to localizing implementation of the UN SDGs, various networking initiatives are also leveraging the sharing of information and fiscal resources to enable Canadian cities to accelerate their achievements. This type of collaboration for the goals represents an important aspect of SDG Cities in Canada that warrants unique profiling.

Research reveals that there are many networks and organizations engaged in working with municipalities across the country. The following represent only a small sample of the types of networks present, ranging in scale and scope national, and international, orientation to regionally specific.

5.1 Federation of Canadian Municipalities

The Federation for Canadian Municipalities (FCM) is Canada's oldest and longest running municipal network aimed at advancing the interests of local government in Canada. FCM serves as the national voice of municipal government, representing over 2,000 Canadian municipalities across all territories and provinces (Federation of Canadian Municipalities, 2024a). FCM facilitates municipal engagement in several programs that offer funding, training and resources. These programs are also aligned with achieving UN SDGs including:

- Green Municipal Fund a \$1.65 billion endowment created by the Federal Government in 2000 that is specifically designed to support Canadian municipalities' sustainability transformation ((Green Municipal Fund, 2024) (Active Neighbhourhoods Canada, 2024));
- Municipal Asset Management Program provides funding, training and resources to improve asset management practices. This effort addresses UMF #2/SDG 1.1.2 Safe Drinking Water Management, UMF #3/SDG 1.1.3Safe Sanitation, UMF #40/SDG 6.3.1 Wastewater Safely Treated, UMF #23/SDG 11.1.1 Slum Population (encompassing affordable, adequate housing), UMF #10/SDG 11.2.1 Access to Transit, UMF #41/SDG 11.6.1 Solid Waste Collection and Disposal;
- Women in Local Government providing training, research, and exchange opportunities to build the capacity of women to take on elected leadership roles.
 This effort addresses UMF #69/ SDG 5.5.1b: Women in Sub-national Elected Seats;
- First Nation-Municipal Community Economic Development Initiative provides tools and support to build a shared vision for sustainable and inclusive economic development – (SDG 8);
- International Programs helps local government elected officials and staff share knowledge, solve problems, share services, and forge business connections around the world;
- Partners for Climate Protection Program supports a network of over 400 local

governments in learning how to reduce greenhouse gas emissions and implement climate action (**UMF #50**/ SDG 13.1.1 Total GHGs per capita per year); and

• Global Covenant of Mayors - representing the Canadian chapter of the world's largest coalition of local governments committed to deep climate action.

As well as initiatives to address:

- opioid crisis (UMF #19/SDG 3.4.2 Suicide Mortality Rate);
- social inclusivity (UMF #53/UNESCO #18 Social Inclusion, UMF #54/UNESCO 14 Cultural Knowledge); and
- broadband coverage (**UMF #34**/ SDG 17.6.1 Fixed Internet Broadband Connections) (Federation of Canadian Municipalities, 2024b).

The Green Municipal Fund is helping municipalities accelerate towards becoming net zero communities. To date it has approved 2,100 projects worth \$1.45 billion Canadian dollars, avoiding 2.87 million tonnes of greenhouse gas emissions, and contributing 12,622 person years of employment and \$1.2 billion to the Canadian economy (Green Municipal Fund, 2024). FCM also partners with ICLEI-Local Governments for Sustainability Canada to deliver the Partners for Climate Protection Program that helps cities and communities track, report and manage their greenhouse gas emissions. This is the longest running municipal climate change campaign in Canada. It has 527 participating municipalities across the country, representing 70% of the Canadian population (Partners for Climate Protection, 2021). The program is also affiliated with the Global Covenant of Mayors, an international effort by local governments to manage greenhouse emissions (Federation of Canadian Municipalities, 2024c)

5.2 ICLEI - Local Governments for Sustainability Canada

The International Council for Local Environmental Initiatives (ICLEI) was established at the inaugural World Congress of Local Governments for a Sustainable Future in 1990, with over 200 local governments from 43 countries participating. In 2003, the organization subsequently changed its name to ICLEI-Local Governments for Sustainability to reflect its broadening mandate beyond environmental issues. Today, ICLEI – Local Governments for Sustainability comprises a membership organization with a network of 2,500 local governments across 125 countries working together to advance urban sustainability (ICLEI – Local Governments for Sustainability Canada, 2024).

ICLEI - Local Governments for Sustainability Canada delivers programs of specific interest to its Canadian members, comprising over 400 local governments and engaging over 400 more collaborators including industry experts, government stakeholders, and civil society groups. These programs also align with UN SDGs as well as the New Urban Agenda (NUA), and City Prosperity Index (CPI).

The programs include:

 Building Adaptative and Resilient Communities (BARC) – assisting communities in all areas of the adaptation planning process with provision of tools and online resources. (UMF #44/ SDG 11.7.1 Access to open public space, UMF #47 /CPI Green area per capita, **UMF #52**/ NUA 50 Budget for climate change mitigation and adaptation, **UMF #20**/ SDG 11.5.1 Population affected by hazardous events, **UMF #74**/ SDG 5.3.3 Local disaster risk reduction strategies);

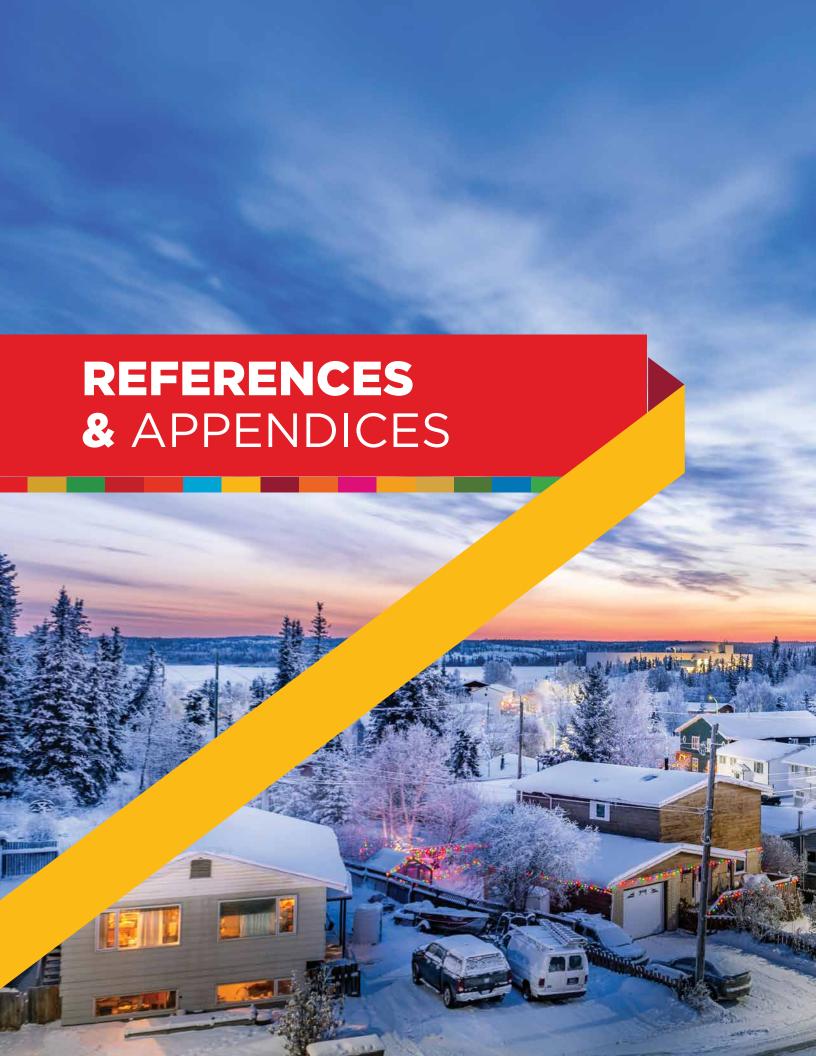
- Partners for Climate Protection (PCP) a network of local governments engaged in energy and emissions management, delivered in partnership with the Federation of Canadian Municipalities. Participants gain access to a variety of tools and resources. ICLEI-Local Governments for Sustainability Canada can also provides customized consulting to assist municipalities with greenhouse gas emissions inventories, target setting, community consultation, and plan development. (UMF #29/ CPI Use of public transit, UMF #46/ SDG 7.2.1 Renewable energy share, UMF #50/ SDG 13.2.2 GHG emissions per capita per year, UMF #51/ SDG 11.3.1 Efficient land use); and
- Biodiversity ICLEI-Local Governments for Sustainability Canada collaborates on intergovernmental and multi-stakeholder consultation, applied research, and sharing of best practices nationally and internationally to raise awareness about the important role of biodiversity and nature's services in the health of cities. (UMF #40/SDG 6.3.1 Wastewater safely treated, UMF #41/SDG 11.6.1 Solid waste collection and disposal, UMF #49/NUA 48 Protected natural area, UMF #48/OECD 15 Change in tree cover).

5. 3 Sustainable Development Solutions Network - Canada

Hosted by the University of Waterloo, located in Ontario, the Sustainable Development Solutions Network (SDSN) – Canada engages Canadian universities and colleges to facilitate learning and accelerate problem-solving aimed at achieving the 2030 Agenda and SDGs. SDSN Youth – Canada was initiated in 2018 and has 400 members participating across 16 hubs, reaching 3,600 youth across the country with similar aims of being solutions-oriented. SDSN – Canada is affiliated with the global UN SDSN initiative that produces a number of toolkits including: *Getting Started with the SDGs in Cities*. To access this report visit: https://resources.unsdsn.org/getting-started-with-the-sdgs-in-cities.

5.4 BCIT Centre for Ecocities - Municipal Peer Network

The British Columbia Institute of Technology (BCIT) Centre for Ecocities was created as a legacy of the Ecocity World Summit Conference co-hosted by BCIT and the City of Vancouver in 2019. UN-Habitat was a participating affiliate. The Centre advances education and research in sustainable cities and lifestyles and includes a Municipal Peer Network that provides support to over 30 local governments across the Province of British Columbia to develop their consumption based, i.e., Scope 3, community greenhouse gas emissions inventories and ecological footprint assessments. Pathways to net-zero and living within ecological limits, also known as planetary boundaries, are explored through an equity lens. The emphasis on equity represents an evolution towards shared understanding that the generation of greenhouse gas emissions is uneven, with high-income earners generally producing more emissions. An equity play-book is being developed to help municipalities implement their greenhouse gas emissions strategies in ways that support equity-deserving groups. Funding for the Centre is generously provided through a grant from the Real Estate Foundation of British Columbia. To learn more visit: https://www.bcit.ca/centre-for-ecocities/.



References

Active Neighbhourhoods Canada. (2024, February 23). *Green Municipal Fund*. Retrieved from Co-desiging the Active City: https://participatoryplanning.ca/community/green-municipal-fund#:~:text=In%202000%2C%20the%20Green%20Municipal,and%20a%20strong%20 business%20case.

Canada Mortgage and Housing Corporation. (2018, March 31). About Affordable Housing in Canada: Programs and investments that help Canadians access high-quality affordable housing. Retrieved from Canada Mortgage and Housing Corporation - Société canadienne d'hypothèques et de logement: https://www.cmhc-schl.gc.ca/professionals/industry-innovation-and-leadership/industry-expertise/affordable-housing/about-affordable-housing/affordable-housing-in-canada#:~

Caron, N., & Plunkett-Latimer, J. (2022, May 3). *Income Research Paper Series: Canadian Income Survey: Food insecurity and unmet health care needs, 2018 and 2019*. Retrieved from Statistics Canada: https://www150.statcan.gc.ca/n1/pub/75f0002m/75f0002m2021009-eng. htm

Dahms, K., & Ducharme, A. (2023, August 8). *Housing Affordability: recent improvement will not carry into H2 2023*. Retrieved from Housing Affordability Monitor: Economics and Strategy: https://www.nbc.ca/content/dam/bnc/taux-analyses/analyse-eco/logement/housing-affordability.pdf

Duong, D., & Vogel, L. (2023, April 24). *National survey highights worsening primary care access*. Retrieved from Canadian Medical Association Journal: https://www.cmaj.ca/content/195/16/E592

Employment and Social Development Canada. (2022a, August 19). *Taking Action Together - Canada's 2021 Annual Report on the 2030 Agenda and the Sustainable Development Goals*. Retrieved from Canada and the Sustainable Development Goals: https://www.canada.ca/en/employment-social-development/programs/agenda-2030/taking-action-together.html

Employment and Social Development Canada. (2022b, April 25). *Moving forward together: Canada's 2030 Agenda National Strategy*. Retrieved from Canada and the Sustainable Development Goals: https://www.canada.ca/en/employment-social-development/programs/agenda-2030/moving-forward.html

Employment and Social Development Canada. (2023a). Canada's 2023 Voluntary National Review - A Continued Journey for Implementing the 2030 Angenda and the Sustainable Development Goals. Ottawa: Government of Canada. Retrieved from https://www.canada.ca/en/employment-social-development/programs/agenda-2030/voluntary-national-review/2023-report.html

Employment and Social Development Canada. (2023b, July 13). *Canada and the Sustainable Development Goals*. Retrieved from Government of Canada: https://www.canada.ca/en/employment-social-development/programs/agenda-2030.html

Employment and Social Development Canada. (2023c, January 4). Sustainable Development Goal 11: Sustainable cities and communities. Retrieved from Employment and Social Development Canada: https://www.canada.ca/en/employment-social-development/programs/agenda-2030/cities-communities.html

Employment and Social Development Canada. (2023d, September 1). Sustainable Development Goal 3: Good Health and Well-being. Retrieved from Canada and the Sustainable Development Goals: https://www.canada.ca/en/employment-social-development/programs/agenda-2030/health-well-being.html

Employment and Social Development Canada. (2023e, January 4). Sustainable Development Goal 10: Reduced inequalities. Retrieved from Canada and the Sustainable Development Goals: https://www.canada.ca/en/employment-social-development/programs/agenda-2030/reduced-inequalities.html

Environment and Climate Change Canada. (2023, July 10). *Temperature Change in Canada*. Retrieved from Canadian Environmental Sustainability Indicators: https://www.canada.ca/en/environment-climate-change/services/environmental-indicators/temperature-change.html

Federation of Canadian Municipalities. (2024a, February 23). *About FCM*. Retrieved from Federation of Canadian Municipalities: https://fcm.ca/en/about-fcm#:~:text=FCM%20has%20 been%20the%20national,provincial%20and%20territorial%20municipal%20associations.

Federation of Canadian Municipalities. (2024b, February 23). *Focus Areas*. Retrieved from Federation of Canadian Municipalities: https://fcm.ca/en/focus-areas

Federation of Canadian Municipalities. (2024c, February 24). *Partners for Climate Protection*. Retrieved from Federation of Canadian Municipalities: https://fcm.ca/en/programs/partners-climate-protection

Food Banks Canada. (2023, March). *Hunger Count 2023: Overall Findings*. Retrieved from Food Banks Canada: https://foodbankscanada.ca/hungercount/overall-findings/

Green Municipal Fund. (2024, February 23). *Green Munciipal Fund*. Retrieved from Green Municipal Fund: https://greenmunicipalfund.ca/

Health Canada. (2019, September 17). Canada's Health Care System. Retrieved from Health Canada: https://www.canada.ca/en/health-canada/services/health-care-system/reports-publications/health-care-system/canada.html#The%20Role%20of%20Government

ICLEI - Local Governments for Sustainability Canada. (2024, February 23). *Who We Are*. Retrieved from ICLEI - Local Governments for Sustainability Canada: https://icleicanada.org/about-iclei/

Indigenous Services Canada. (2023, March 9). *United Nations 2030 Agenda and the Sustainable Development Goals*. Retrieved from Departmental Plans and Results for Indigenous Services Canada: https://www.isc.gc.ca/eng/1666291904593/1666291923094

National Climate Change Secretariat (Canada). Municipalities Table. (2013, April 3). *Final report, Municipalities Table options paper/approved by the Municipalities Table*. Retrieved from Government of Canada Publications: https://publications.gc.ca/site/eng/9.572975/publication. html

Partners for Climate Protection. (2021). *Partners for Climate Protection: Resources*. Retrieved from Partners for Climate Protection: https://www.pcp-ppc.ca/resources/annual-report-the-partners-for-climate-protection-program-2022-2023

Privy Council Office. (2021, November 23). *Building a resilient economy: a cleaner & healthier future for our kids*. Retrieved from Government of Canada, 2021 Speech from the Throne: https://www.canada.ca/en/privy-council/campaigns/speech-throne/2021/building-resilient-economy.html#diversity-inclusion

Statistics Canada. (2017, February 8). *Population Centre and Rural Area Classification 2016*. Retrieved from Statistics Canada: https://www.statcan.gc.ca/en/subjects/standard/pcrac/2016/introduction#Status

Statistics Canada. (2020, October). *Health Fact Sheets: Primary health care providers, 2019*. Retrieved from statscan.gc.ca: https://www150.statcan.gc.ca/n1/pub/82-625-x/2020001/article/00004-eng.htm

Statistics Canada. (2021, November 8). Retrieved from Sustainable Development Goals Data Hub: https://www144.statcan.gc.ca/sdg-odd/index-eng.htm

Statistics Canada. (2022a, November 21). *Map 5. Core housing need rate falls across the provinces and territories, from 2016 to 2021.* Retrieved October 1, 2023, from Statistics Canada: https://www150.statcan.gc.ca/n1/daily-quotidien/220921/mc-b005-eng.htm

Statistics Canada. (2022b, November 21). *Table 4. Percent of households spending 30% or more of income on shelter cost by tenure, 2016 and 2021.* Retrieved from The Daily: https://www150.statcan.gc.ca/n1/daily-quotidien/220921/t004b-eng.htm

Statistics Canada. (2023, September 29). *Indicator 2.1.1 Prevalence of food insecurity*. Retrieved from Canadian Indicator Framework for the Sustainable Development Goals Data Hub: https://sdgcif-data-canada-oddcic-donnee.github.io/2-1-1/

Statistics Canada. (2023a, September 29). 17 goals to transform our world: Welcome to the Canadian Indicator Framework for the Sustainable Development Goals Data Hub. Retrieved from Canadian Indicator Framework for the Sustainable Development Goals Data Hub: https://sdgcif-data-canada-oddcic-donnee.github.io/

Statistics Canada. (2023b, September 29). Ensure healthy lives and promote well-being for all at all ages. Retrieved from Canadian Indicator Framewok for the Sustainable Development Goals Data Hub: https://sdgcif-data-canada-oddcic-donnee.github.io/3/

Statistics Canada. (2023c, September 29). *Indicator 3.12.1 Incidence of opioid and stimulant overdose and related harms*. Retrieved from Canadian Indicator Framework for the Sustainable Development Goals Data Hub: https://sdgcif-data-canada-oddcic-donnee.github. io/3-12-1/

Statistics Canada. (2023d, September 29). *Indicator 2.1.1 Prevalence of food insecurity*. Retrieved from Canadian Indicator Framework for the Sustainable Development Goals Data Hub: https://sdgcif-data-canada-oddcic-donnee.github.io/2-1-1/

Statistics Canada. (2023e, September 29). End hunger, achieve food security and improved nutrition and promote sustainable agriculture. Retrieved from Canadian Indicator Framework for the Sustainable Development Goals Data Hub: https://sdgcif-data-canada-oddcic-donnee.github.io/2/

Statistics Canada. (2023f, September 29). *Take urgent action to combat climate change and its impacts*. Retrieved from Canadian Indicator Framework for the Sustainable Development Goals Data Hub: https://sdgcif-data-canada-oddcic-donnee.github.io/13/

Statistics Canada. (2023g, September 29). *Indicator 6.3.1 Water use growth rate*. Retrieved from Canadian Indicator Framework for the Sustainable Development Goals Data Hub: (https://sdgcif-data-canada-oddcic-donnee.github.io/6-3-1/

Statistics Canada. (2023h, September 29). *Indicator 6.2.1 Percentage of municipalities across Canada with sustainaned drinking water advisories*. Retrieved from Canadian Indicator Framework for the Sustainable Development Goals Data Hub: https://sdgcif-data-canada-oddcic-donnee.github.io/6-2-1/

Statistics Canada. (2023i, September 29). *Progress Measurement for Canada's Sustainable Development Goals*. Retrieved from Canadian Indicator Framework for the Sustainable Development Goals Data Hub: https://sdgcif-data-canada-oddcic-donnee.github.io/methodology/

Statistics Canada. (2023j, September 29). *Indicator 10.2.1 Proportion of the population reporting discrimintation or unfair treatement*. Retrieved from 17 goals to transform our world: https://sdgcif-data-canada-oddcic-donnee.github.io/10-2-1/

UN Department of Economic and Social Affairs. (2024, February 24). *Goals 10: Reduced inequality within and among countries*. Retrieved from The 17 Goals: https://sdgs.un.org/goals/goal10

UN-Habitat. (2019, 02 n/a). *CPI Medata 2016*. Retrieved from UN-Habitat CPI Medatadata 2016: https://unhabitat.org/sites/default/files/2019/02/CPI-METADATA.2016.pdf

UN-Habitat. (2020, n/a n/a). NUA Monitoring Framework, and related Indicators. Draft version 25 September 2020. Retrieved from UN-Habitat NUA Monitoring Framework and related indicators.: https://unhabitat.org/sites/default/files/2020/10/nua-monitoring-framework-and-related-indicators_1.pdf

UN-Habitat. (2021a, n/a n/a). *City Prosperity Index*. Retrieved from UN-Habitat Urban Indicators Database: https://data.unhabitat.org/pages/city-prosperity-index

UN-Habitat. (2021b, n/a n/a). New Urban Agenda (NUA). Retrieved from UN-Habitat Urban Indicators Data Base: https://data.unhabitat.org/pages/new-urban-agenda

UN-Habitat. (2022). The Global Urabn Monitoring Framework: a guide for urban monitoring of SDGs and NUA and other urban-related thematic or local, national and global frameworks. Nairobi: UN-Habitat. Retrieved from https://unhabitat.org/the-global-urban-monitoring-framework

UNESCO. (2024, 02 28). *Culture 2030 Indicators*. Retrieved from UNESCO World Heritage: https://whc.unesco.org/en/culture2030indicators/

APPENDIX A: Government of Canada SDG Ambitions Progress

All data reported as presented by Statistics Canada.

Source: Statistics Canada. 2023. Canadian Indicator Framework for the Sustainable Development Goals Indicator Hub. https://sdgcif-data-canada-oddcic-donnee.github.io/ (last updated September 29, 2023)

SDG	Ambition	Target	Indicator	Status
1 No Poverty	Reduce Poverty in Canada in all its forms	By 2030, a 50% reduction in the rate of poverty, compared to the 2015 level	Poverty rate, as measured by Canada's official poverty line	On Track (green)
	(as above)	No specific target	Prevalence of asset resilience	Limited Progress (orange)
2 Zero Hunger	Canadians have access to sufficient, affordable and nutritious food	No specific target	Prevalence of food insecurity	Deterioration (red)
	Canadian agriculture is sustainable	By 2030, support improvement in the environmental performance of the agriculture sector by achieving a score of 71 or higher for the Index of Agri-Environmental Sustainability	Index of Agri- Environmental Sustainability	Not available
3 Good Health and Well-being	Canadians adopt healthy behaviours	By March 31, 2022, 30% of Canadians report eating fruits and vegetables 5 or more times per day	Percentage of Canadians who report eating fruits and vegetables 5 or more times per day	Deterioration (red)
	(as above)	By 2023, less than 10% of students (grades 7-12) have used a vaping product (e-cigarettes only) in the past 30 days	Prevalence of vaping among youth	Deterioration (red)
	(as above)	No specific target	Percentage of the population that is overweight or obese	On Track (green)
	(as above)	No specific target.	Prevalence of harmful alcohol use	On Track (green)
	Canadians have healthy and satisfying lives	No specific target.	Percentage of Canadians who are satisfied or very satisfied with their life	Deterioration (red)

SDG	Ambition	Target	Indicator	Status
	(as above)	No specific target	Percentage of Canadians who perceived their overall health and social well- being as very good to excellent	Deterioration (red)
	(as above)	No specific target	Percentage of Canadians who perceived their mental health as very good to excellent	Deterioration (red)
	Canada prevents causes of premature death	By 2025, 95% coverage of all childhood vaccines and 90% coverage of all adolescent vaccines	Vaccination rates for selected diseases	Not available
	(as above)	No specific target	Incidence of selected diseases	Not available
	(as above)	No specific target	Mortality rate for selected causes of death	Not available
	(as above)	Eliminate tuberculosis across Inuit Nunangat by 2030, and reduce the incidence of active tuberculosis by at least 50% by 2025	Tuberculosis incidence per 100,000 population in Inuit Nunangat	Deterioration (red)
	(as above)	Reduction from the previous year in the incidence of opioid and stimulant overdose related harms	Incidence of opioid and stimulant overdose related harms	*this field is blank (accessed on November 30, 2023). NB: Was Deterioration 2016-2021, slight improvement 2022
	(as above)	By 2035, less than 5% of Canadians (aged 15+) are cigarette smokers	Prevalence of cigarette smoking	On Track (green)
4 Quality Education	Canadians have access to inclusive and quality education throughout their lives	No specific target	High school completion rate	Progress made but acceleration needed (yellow)
	(as above)	No specific target	Post-secondary education attainment rate	On Track (green)
5 Gender Equality	Eliminate gender- based violence and harassment	Fewer women are victims of intimate partner violence and sexual assault	Proportion of the population who self-reported being sexually assaulted in the last 12 months	Not available

SDG	Ambition	Target	Indicator	Status
	(as above)	(as above)	Proportion of women and girls aged 15 years and older subjected to physical, sexual or psychological violence by a current or former intimate partner in the last 12 months	Not available
	Gender equality in leadership roles and at all levels of decision-making	Greater representation of women in leadership roles	Proportion of leadership roles held by women	Not available
	Canadians share responsibilities within households and families	Equal sharing of parenting roles and family responsibilities	Proportion of time spent on unpaid domestic and care work	Not available
6 Clean Water and Sanitation	Canadians have access to drinking water and use it in a sustainable manner	All of the long- term drinking water advisories on public systems on reserve are to be resolved	Number of long- term drinking water advisories on public systems on reserves	On Track (green)
	(as above)	No specific target	Percentage of municipalities across Canada with sustained drinking water advisories	Deterioration (red)
	(as above)	No specific target	Water use growth rate	Moderate Deterioration (orange)
	(as above)	No specific target	Water quality in Canadian rivers	Moderate Deterioration (orange)
7 Affordable and Clean Energy	Canadians reduce their energy consumption	By 2030, 600 petajoules of total annual energy savings will be achieved as a result of the adoption of energy efficiency codes, standards and practices from a baseline savings of 20.0 petajoules in 2017 to 2018	Annual energy savings resulting from adoption of energy efficiency codes, standards and practices	On Track (green)
	Canadians reduce their energy consumption	No specific target	Total energy consumption per capita	On Track (green)
	Canadians have access to clean and renewable energy	By 2030, 90%, and in the long term 100%, of Canada's electricity is generated from renewable and non- emitting sources	Proportion of electricity generated from renewable and non-greenhouse gas emitting sources	Limited Progress (orange)

SDG	Ambition	Target	Indicator	Status
8 Decent Work and Economic Growth	Canadians have access to quality jobs	No specific target	Unemployment rate	On Track (green)
	(as above)	No specific target	Proportion of 15+ employees earning less than 66% of the median hourly wage of permanent full- time 15+ employees	On Track (green)
	(as above)	No specific target	Proportion of youth not in education, employment or training	On Track (green)
	(as above)	No specific target	Rate of involuntary part-time work	On Track (green)
	Canadians contribute to and benefit from sustainable economic growth	No specific target	Gross domestic product per capita	On Track (green)
	(as above)	Achieve a 8% growth in jobs in the clean technology products sector by March 31, 2024		On Track (green)
9 Industry, Innovation, and Infra- structure	Canada fosters sustainable research and innovation	No specific target	Proportion of innovation in environment-related technology	On Track (green)
	(as above)	No specific target	Gross domestic expenditure on research and development intensity	Limited Progress (orange)
	Canadians have access to modern and sustainable infrastructure	By 2026, 98% Canadian homes and small businesses have access to Internet at speeds of 50 Mbps download / 10 Mbps upload, with the goal of connecting all Canadians to these speeds by 2030	Proportion of households that have access to broadband Internet service at speeds of 50/10 Mbps	On Track (green)
	(as above) Improved access to the latest mobile wireless services		Proportion of Canadians that have access to the latest generally deployed mobile wireless technology	Limited Progress (orange)
	(as above)	No specific target	Greenhouse gas emissions per dollar of value-added from the production of infrastructure assets	On Track (green)

SDG	Ambition	Target	Indicator	Status
	(as above)	By March 31, 2024, a total of 1,000 EV Chargers, 22 natural gas stations and 15 hydrogen stations along major highways, freight corridors and key metropolitan centres are under development and completed	Number of low carbon recharging and refueling stations under development and completed along major highways, and in rural and urban areas across Canada	Target Achieved (green)
	(as above)	By March 31, 2026, 20,000 chargers in public places, on- street, at apartment buildings, retail outlets, and the workplace are under development and completed	Number of low carbon recharging and refueling stations under development and completed in public places, onstreet, at apartment buildings, retail outlets, and the workplace	Target Achieved (green)
	Canadians live free of discrimination and inequalities are reduced	scrimination nequalities		Progress made but acceleration needed (yellow)
	(as above)	No specific target	Proportion of the population reporting discrimination or unfair treatment	Deterioration (red)
	(as above)	No specific target	Median hourly wage ratio	Limited Progress (orange)
	(as above)	No specific target	Median household after-tax income	On Track (green)
11 Sustain- able Cities and Com- munities	Canadians have access to quality housing	Reduce chronic homelessness by at least 31% by March 2024	Growth rate of people experiencing chronic homelessness	Not available
	(as above)	No specific target	Proportion of households in core housing need	On Track (green)
	Canadians live in healthy, accessible, and sustainable cities and communities	Increase the percentage of Canadians living in areas where air pollutants concentrations are less or equal to the standards from 60% in 2005 to 85% in 2030	Percentage of the population living in areas where air pollutants concentrations are less or equal to the 2020 Canadian Ambient Air Quality Standards	Target Achieved (green)
	(as above)	No specific target	Percentage of the population living within 500 meters of a public transport stop	Not available

SDG	Ambition	Target	Indicator	Status
	(as above)	By 2030, 22% of commuters adopt shared or active transportation	Percentage of the population using shared or active transportation for commuting	Deterioration (red)
	(as above)	No specific target	Total waste disposal per capita	Limited Progress (orange)
	(as above)	No specific target	Percentage of the population aged 12 and over who reported their sense of belonging to their local community as being very strong or somewhat strong	Limited Progress (orange)
12 Responsible Production and Consumption	Canadians consume in a sustainable manner	Zero-emission vehicles represent 10% of new light duty vehicle sales by 2025, 30% by 2030 and 100% by 2040	Proportion of new light duty vehicle registrations that are zero-emission vehicles	On Track (green)
	(as above)	No specific target	Proportion of businesses that adopted selected environmental protection activities and management practices	Deterioration (red)
	(as above)	No specific target	Total waste diversion per capita	Progress made but acceleration needed (yellow)
13 Climate Action	Canadians reduce their greenhouse gas emissions	By 2030, reduce Canada's total greenhouse gas emissions by 40 to 45%, relative to 2005 emission levels. By 2050, achieve economy-wide net- zero greenhouse gas emissions.	Greenhouse gas emissions	Not available
	Canadians are well-equipped and resilient to face the effects of Climate change	No specific target	Frequency of selected natural disasters	Not available
	(as above)	No specific target	Proportion of municipal organization who factored climate change adaptation into their decision- making process	On Track (green)

SDG	Ambition	Target	Indicator	Status
14 Live Below Water	Canada protects and conserves marine areas and sustainably manages ocean fish stocks	Conserve 25% of Canada's oceans by 2025, working towards 30% by 2030	Proportion of marine and coastal areas conserved	On Track (green)
	(as above)	By 2023, major fish and invertebrate stocks are managed and harvested at levels considered to be sustainable, from a baseline of 96% in 2016	Proportion of fish stocks that are sustainably harvested	Progress made but acceleration needed (yellow)
15 Life on Land	Canada ensures all species have healthy and viable populations	No specific target Proportion of na wild species ran		Limited Progress (orange)
	(as above)	No specific target	Proportion of species at risk showing progress towards their population and distribution objectives	Progress made but acceleration needed (yellow)
	Canada conserves and restores ecosystems and habitat	Conserve 25% of Canada's land by 2025, working towards 30% by 2030	Proportion of terrestrial (land and freshwater) area conserved	Limited Progress (orange)
	Canada sustainably manages forests, lakes and rivers	No specific target	Proportion of forest area under an independently verified forest management certification scheme	Deterioration (red)
	(as above)	No specific target	Forest area as a proportion of total land area	Not available
16 Peace, Justice and Strong Institutions	Canadians are safe and secure, in person and online	No specific target	Proportion of Canadians who reported feeling safe walking alone in their neighborhood after dark	*this field is blank (accessed on November 30, 2023).
	(as above)	No specific target	Crime severity index	Deterioration (red)
	(as above)	No specific target	Incidence of selected types of crime	Not available
	(as above)	No specific target	Incidence of cyber- crime	Deterioration (red)

SDG	Ambition	Target	Indicator	Status
	Canadians have equal access to justice Note: Civil Justice is an important component of the Canadian Ambition, Equal access to justice as Canadians' ability to access civil justice impacts their lives materially. Relevant civil justice data is currently being collected by Statistics Canada and will be released in 2022.	No specific target	Criminal Court case completion time	Substantial Deterioration (red)
	(as above)	No specific target	Incarceration rate	On Track (green)
	Canadians are supported by effective, accountable, and transparent institutions	No specific target	Proportion of the population with high levels of confidence in selected institutions	Not available
17 Partnership for the Goals	Canada fosters collaboration and partnerships to advance the SDGs	No specific target	Number of open datasets published by the Government of Canada	Not available
	(as above)	No specific target	Total official support for sustainable development	On Track (green)

APPENDIX B:

Government of Canada SDG Ambitions Progress and UMF

All data reported as presented by Statistics Canada.

Source: Statistics Canada. 2023. Canadian Indicator Framework for the Sustainable Development Goals Indicator Hub. https://sdgcif-data-canada-oddcic-donnee.github.io/(last updated September 29, 2023)

SDG	Ambition	Target	Indicator	Status	UMF Indicator	UMF Attribute
1 No Poverty 1 No Poverty	Reduce Poverty in Canada in all its forms	By 2030, a 50% reduction in the rate of poverty, compared to the 2015 level	Poverty rate, as measured by Canada's official poverty line	On Track (green)	9 (1.2.1) Basic Services	Inclusive Society

SDG	Ambition	Target	Indicator	Status	UMF Indicator	UMF Attribute
	(as above)	No specific target	Prevalence of asset resilience	Limited Progress (orange)		
2 Zero Hung 2 ZERO 2 HUNGER	Canadians have access to sufficient, affordable and nutritious food	No specific target	Prevalence of food insecurity	Deteriora- tion (red)	#22 (1.3.6) Food insecurity	Resilient Society
	Canadian agriculture is sustainable	By 2030, support improvement in the environmental performance of the agriculture sector by achieving a score of 71 or higher for the Index of Agri- Environmental Sustainability	Index of Agri- Environmental Sustainability	Not available		
3 Good Health and Well-being 3 GOOD HEALTH AND WELL-BEING	Canadians adopt healthy behaviours	By March 31, 2022, 30% of Canadians report eating fruits and vegetables 5 or more times per day	Percentage of Canadians who report eating fruits and vegetables 5 or more times per day	Deteriora- tion (red)		
	(as above)	By 2023, less than 10% of students (grades 7-12) have used a vaping product (e-cigarettes only) in the past 30 days	Prevalence of vaping among youth	Deteriora- tion (red)		
	(as above)	No specific target	Percentage of the population that is overweight or obese	On Track (green)	13b (1.2.5b) Malnutri- tion Under 5 (over- weight)	Inclusive Society
	(as above)	No specific target.	Prevalence of harmful alcohol use	On Track (green)		

SDG	Ambition	Target	Indicator	Status	UMF Indicator	UMF Attribute
	Canadians have healthy and satisfying lives	No specific target.	Percentage of Canadians who are satisfied or very satisfied with their life	Deteriora- tion (red)		
	(as above)	No specific target	Percentage of Canadians who perceived their overall health and social well- being as very good to excellent	Deteriora- tion (red)		
	(as above)	No specific target	Percentage of Canadians who perceived their mental health as very good to excellent	Deteriora- tion (red)		
	Canada prevents causes of premature death	By 2025, 95% coverage of all childhood vaccines and 90% coverage of all adolescent vaccines	Vaccination rates for selected diseases	Not available	14 (1.2.6) Vaccinated children	Inclusive Society
	(as above)	No specific target	Incidence of selected diseases	Not available		
	(as above)	No specific target	Mortality rate for selected causes of death	Not available	18	
	(as above)	Eliminate tuberculosis across Inuit Nunangat by 2030, and reduce the incidence of active tuberculosis by at least 50% by 2025	Tuberculosis incidence per 100,000 population in Inuit Nunangat	Deterioration (red)		

SDG	Ambition	Target	Indicator	Status	UMF Indicator	UMF Attribute
	(as above)	Reduction from the previous year in the incidence of opioid and stimulant overdose related harms	Incidence of opioid and stimulant overdose related harms	*this field is blank (ac- cessed on November 30, 2023). NB: Was Deteriora- tion 2016- 2021, slight improve- ment 2022	19 (1.3.3) Suicide Mortality Rate	Resilient Society
	(as above)	By 2035, less than 5% of Canadians (aged 15+) are cigarette smokers	Prevalence of cigarette smoking	On Track (green)		
4 Quality Education 4 QUALITY EDUCATION	Canadians have access to inclusive and quality education throughout their lives	No specific target	High school completion rate	Progress made but acceleration needed (yellow)	11 (1.2.3) Education completion rate	Inclusive Society
	(as above)	No specific target	Post- secondary education attainment rate	On Track (green)	33 (2.3.3) Adult population with degree/ certificate	Resilient Economy
5 Gender Equality 5 GENDER COUNTY	Eliminate gender- based violence and harassment	Fewer women are victims of intimate partner violence and sexual assault	Proportion of the population who self- reported being sexually assaulted in the last 12 months	Not available	63 (5.1.2) Victims of physical or sexual harassment	Safe and Peaceful Governance and Imple- mentation
	(as above)	(as above)	Proportion of women and girls aged 15 years and older subjected to physical, sexual or psychological violence by a current or former intimate partner in the last 12 months	Not available	64 (5.1.3) Intimate partner violence	Safe and Peaceful Governance and Imple- mentation

SDG	Ambition	Target	Indicator	Status	UMF Indicator	UMF Attribute
	Gender equality in leadership roles and at all levels of decision- making	Greater representation of women in leadership roles	Proportion of leadership roles held by women	Not available	69 (5.2.3) Proportion of seats held by women in sub-nation- al/local govern- ments	Inclusive Governance and Imple- mentation
	Canadians share re- sponsibili- ties within households and families	Equal sharing of parenting roles and family responsibilities	Proportion of time spent on unpaid domestic and care work	Not available	26 (2.1.2) Time spent on unpaid domestic and care work	Safe and Peaceful Economy
6 Clean Water and Sanitation 6 CLEAN WATER AND SANITATION	Canadians have access to drinking water and use it in a sustainable manner	All of the long-term drinking water advisories on public systems on reserve are to be resolved	Number of long-term drinking water advisories on public systems on reserves	On Track (green)	2 (1.1.2) Safely managed drinking water services	Safe and Peaceful Society
	(as above)	No specific target	Percentage of municipalities across Canada with sustained drinking water advisories	Deteriora- tion (red)	2 (1.1.2) Safely managed drinking water services	Safe and Peaceful Society
	(as above)	No specific target	Water use growth rate	Moderate Deteriora- tion (orange)		
	(as above)	No specific target	Water quality in Canadian rivers	Moderate Deteriora- tion (orange)		
7 Affordable and Clean Energy 7 AFFORDARLE AND CLEAN ENERGY	Canadians reduce their energy consumption	By 2030, 600 petajoules of total annual energy savings will be achieved as a result of the adoption of energy efficiency codes, standards and practices from a baseline savings of 20.0 petajoules in 2017 to 2018	Annual energy savings resulting from adoption of energy efficiency codes, standards and practices	On Track (green)		

SDG	Ambition	Target	Indicator	Status	UMF Indicator	UMF Attribute
	(as above)	No specific target	Total energy consumption per capita	On Track (green)		
	Canadians have access to clean and renewable energy	By 2030, 90%, and in the long term 100%, of Canada's electricity is generated from renewable and non-emitting sources	Proportion of electricity generated from renewable and non-greenhouse gas emitting sources	Limited Progress (orange)	46 (3.3.1) Renewable Energy Share	Resilient Environ- ment
8 Decent Work and Economic Growth	Canadians have access to quality jobs	No specific target	Unemploy- ment rate	On Track (green)	27 (2.2.1) Unemploy- ment rate	Inclusive Economy
	(as above)	No specific target	Proportion of 15+ employees earning less than 66% of the median hourly wage of permanent full-time 15+ employees	On Track (green)		
	(as above)	No specific target	Proportion of youth not in education, employment or training	On Track (green)	28 (2.2.2) Youth not in education or training	Inclusive Economy
	(as above)	No specific target	Rate of involuntary part-time work	On Track (green)		
	Canadians contribute to and benefit from sustainable economic growth	No specific target	Gross domestic product per capita	On Track (green)	31 (2.3.1) Annual growth rate of GDP per capita	Resilient Economy
	(as above)	Achieve a 8% growth in jobs in the clean technology products sector by March 31, 2024	Jobs in the clean technology products sector	On Track (green)		

SDG	Ambition	Target	Indicator	Status	UMF Indicator	UMF Attribute
9 Industry, Innovation and Infrastructure 9 MOUSTRY, IMMOVATION AND HIPPASTRUCTURE	Canada fosters sustainable research and innovation	No specific target	Proportion of innovation in environment-related technology	On Track (green)		
	(as above)	No specific target	Gross domestic expenditure on research and development intensity	Limited Progress (orange)		
	Canadians have access to modern and sustain- able infra- structure	By 2026, 98% Canadian homes and small businesses have access to Internet at speeds of 50 Mbps download / 10 Mbps upload, with the goal of connecting all Canadians to these speeds by 2030	Proportion of households that have access to broadband Internet service at speeds of 50/10 Mbps	On Track (green)	34 (2.3.4) Fixed Internet broadband subscrip- tions	Resilient Economy
	(as above)	Improved access to the latest mobile wireless services	Proportion of Canadians that have access to the latest generally deployed mobile wireless technology	Limited Progress (orange)		
	(as above)	No specific target	Greenhouse gas emissions per dollar of value-added from the production of infrastructure assets	On Track (green)		

SDG	Ambition	Target	Indicator	Status	UMF Indicator	UMF Attribute
	(as above)	By March 31, 2024, a total of 1,000 EV Chargers, 22 natural gas stations and 15 hydrogen stations along major highways, freight corridors and key metropolitan centres are under development and completed	Number of low carbon recharging and refueling stations under development and completed along major highways, and in rural and urban areas across Canada	Target Achieved (green)		
	(as above)	By March 31, 2026, 20,000 chargers in public places, on-street, at apartment buildings, retail outlets, and the workplace are under development and completed	Number of low carbon recharging and refueling stations under development and completed in public places, onstreet, at apartment buildings, retail outlets, and the workplace	Target Achieved (green)		
10 Reduced Inequalities 10 MENDATES	Canadians live free of discrimi- nation and inequalities are reduced	No specific target	Gini Coefficient	Progress made but acceleration needed (yellow)	24 (1.4.2) Gini coefficient	Sustainable Society
	(as above)	No specific target	Proportion of the population reporting discrimination or unfair treatment	Deteriora- tion (red)	53 (4.1.1) Culture for social cohesion	Safe and Peaceful Culture
	(as above)	No specific target	Median hourly wage ratio	Limited Progress (orange)		
	(as above)	No specific target	Median household after-tax income	On Track (green)	39 (2.4.2) Mean household income	Sustainable Economy

SDG	Ambition	Target	Indicator	Status	UMF Indicator	UMF Attribute
11 Sustainable Cities and Communities 11 Sustainable Cities and Communities	Canadians have access to quality housing	Reduce chronic homelessness by at least 31% by March 2024	Growth rate of people experiencing chronic homelessness	Not available	23 (1.4.1) Slum population	Sustainable Society
	(as above)	No specific target	Proportion of households in core housing need	On Track (green)	23 (1.4.1) Slum population	Sustainable Society
	Canadians live in healthy, accessible, and sustainable cities and communities	Increase the percentage of Canadians living in areas where air pollutants concentrations are less or equal to the standards from 60% in 2005 to 85% in 2030	Percentage of the population living in areas where air pollutants concentrations are less or equal to the 2020 Canadian Ambient Air Quality Standards	Target Achieved (green)	42 (3.1.3) Air quality	Safe and Peaceful Environ- ment
	(as above)	No specific target	Percentage of the population living within 500 meters of a public transport stop	Not available	10 (1.2.2) Access to public transit	Inclusive Society
	(as above)	By 2030, 22% of commuters adopt shared or active transportation	Percentage of the population using shared or active transportation for commuting	Deteriora- tion (red)	29 (2.2.3) Use of pub- lic trans- port	Inclusive Economy
	(as above)	No specific target	Total waste disposal per capita	Limited Progress (orange)	41 (3.1.2) Waste collection and disposal	Safe and Peaceful Environ- ment
	(as above)	No specific target	Percentage of the population aged 12 and over who reported their sense of belonging to their local community as being very strong or somewhat strong	Limited Progress (orange)	6 (1.1.6) Neighbour- hood safety	Safe and Peaceful Society

SDG	Ambition	Target	Indicator	Status	UMF Indicator	UMF Attribute
12 Responsible Consumption and Production	Canadians consume in a sustainable manner	Zero-emission vehicles represent 10% of new light duty vehicle sales by 2025, 30% by 2030 and 100% by 2040	Proportion of new light duty vehicle registrations that are zero-emission vehicles	On Track (green)		
	(as above)	No specific target	Proportion of businesses that adopted selected environmental protection activities and management practices	Deteriora- tion (red)		
	(as above)	No specific target	Total waste diversion per capita	Progress made but acceleration needed (yellow)	41 (3.1.2) Solid waste collection and disposal	Safe and Peaceful Environ- ment
13 Climate Action 13 CLIMATE 13 CLIMATE	Canadians reduce their greenhouse gas emissions	By 2030, reduce Canada's total greenhouse gas emissions by 40 to 45%, relative to 2005 emission levels. By 2050, achieve economywide net-zero greenhouse gas emissions.	Greenhouse gas emissions	Not available	50 (3.4.1) Total greenhouse gas emissions per year per capita	Sustainable Environ- ment
	Canadians are well- equipped and resilient to face the effects of	No specific target	Frequency of selected natural disasters	Not available	20 (1.3.4) Population affected by hazardous events	Resilient Society
	Climate change				74 (5.3.3.) Local disaster risk reduction strategies	Resilient Governance and Imple- mentation

SDG	Ambition	Target	Indicator	Status	UMF Indicator	UMF Attribute
	(as above)	No specific target	Proportion of municipal organization who factored climate change adaptation into their decision- making process	On Track (green)	52 (3.4.3) Budget for climate change mitigation and adaptation	Sustainable Environ- ment
14 Life Below Water 14 UFE BELOW WATER	Canada protects and conserves marine areas and sustainably manages ocean fish stocks	Conserve 25% of Canada's oceans by 2025, working towards 30% by 2030	Proportion of marine and coastal areas conserved	On Track (green)	49 (3.3.4) Protected natural areas	Resilient Environ- ment
	(as above)	By 2023, major fish and invertebrate stocks are managed and harvested at levels considered to be sustainable, from a baseline of 96% in 2016	Proportion of fish stocks that are sustainably harvested	Progress made but acceleration needed (yellow)		
15 Life on Land 15 Life on Land	Canada ensures all species have healthy and viable populations	No specific target	Proportion of native wild species ranked secure or apparently secure according to the national extinction risk level	Limited Progress (orange)		
	(as above)	No specific target	Proportion of species at risk showing progress towards their population and distribution objectives	Progress made but acceleration needed (yellow)		
	Canada conserves and restores ecosystems and habitat	Conserve 25% of Canada's land by 2025, working towards 30% by 2030	Proportion of terrestrial (land and freshwater) area conserved	Limited Progress (orange)	49 (3.3.4) Protected natural areas	Resilient Environ- ment

SDG	Ambition	Target	Indicator	Status	UMF Indicator	UMF Attribute
	Canada sustainably manages forests, lakes and rivers	No specific target	Proportion of forest area under an independently verified forest management certification scheme	Deteriora- tion (red)	48 (3.3.3) Change in tree cover	Resilient Environ- ment
	(as above)	No specific target	Forest area as a proportion of total land area	Not avail- able	47 (3.3.2) Green area per capita	Resilient Environ- ment
16 Peace, Jus- tice and Strong In- stitutions 16 PEACE, JUSTICE RAIN STRONG RESIDITIONS	Canadians are safe and secure, in person and online	No specific target	Proportion of Canadians who reported feeling safe walking alone in their neighborhood after dark	*this field is blank (accessed on November 30, 2023).	6 (1.1.6) Neighbour- hood safety	Safe and Peaceful Society
	(as above)	No specific target	Crime severity index	Deteriora- tion (red)		
	(as above)	No specific target	Incidence of selected types of crime	Not avail- able		
	(as above)	No specific target	Incidence of cyber-crime	Deteriora- tion (red)		

SDG	Ambition	Target	Indicator	Status	UMF Indicator	UMF Attribute
	Canadians have equal access to justice Note: Civil Justice is an important component of the Canadian Ambition, Equal access to justice as Canadians' ability to access civil justice impacts their lives materially. Relevant civil justice data is currently being collected by Statistics Canada and will be released in 2022.	No specific target	Criminal Court case completion time	Substantial Deteriora- tion (red)		
	(as above)	No specific target	Incarceration rate	On Track (green)		
	Canadians are supported by effective, accountable, and transparent institutions	No specific target	Proportion of the population with high levels of confidence in selected institutions	Not available	65 (5.1.4) Reporting of violence	Safe and Peaceful Governance and Imple- mentation
17 Partner-ship for the Goals 17 PARTINERSHIPS 17 PARTINERSHIPS 10 PARTINERSHIPS 17 POR THE GOALS	Canada fosters collaboration and partnerships to advance the SDGs	No specific target	Number of open datasets published by the Government of Canada	Not available		
	(as above)	No specific target	Total official support for sustainable development	On Track (green)		

Appendix C

Global Urban Monitoring Framework - List of Indicators as aligned with the SDG and other global agreements

Source: The Global Urban Monitoring Framework: A Guide for urban monitoring of SDGs and NUA and other urban-related thematic or local, national and global frameworks Link: https://unhabitat.org/the-global-urban-monitoring-framework

Indicator #	UMF Position #	Global Indicator	Title of UMF Indicator
Objective: SAF	E & PEACEFUL		
Domain: SOCIE	TY		
1	1.1.1	SDG 3.2.1	Under-5 mortality rate
2	1.1.2	SDG 6.1.1	Safely managed drinking water services
3	1.1.3	SDG 6.2.1a	Safely managed sanitation services
4	1.1.4	SDG 6.2.1b	Hand-Washing Facility with Soap and Water
5	1.1.5	UNICEF	Proportion of Births in Health Facilities
6	1.1.6	SDG 16.1.4	Neighborhood safety
7	1.1.7	SDG 3.7.2	Adolescent Birth Rate
8	1.1.8	SDG 3.6.1	Traffic Fatalities
Objective: INC	LUSIVE		
Domain: SOCIE	TY		
9	1.2.1	SDG 1.4.1	Basic Services
10	1.2.2	SDG 11.2.1	Access to public transport
11	1.2.3	SDG 4.1.2	Education completion rate
12	1.2.4	SDG 1.4.2	Secure tenure rights to land
13a	1.2.5a	SDG 2.2.2a	Prevalence of Malnutrition among Children Under Five Years of Age (Overweight)
13b	1.2.5b	SDG 2.2.2b	Prevalence of Malnutrition among Children Under Five Years of Age (Prevalence of Wasting)
14	1.2.6	UNICEF 9	Proportion of Vaccinated children
15	1.2.7	SDG 10.7.2	Welfare of Migrants
16	1.2.8	Culture-2030 (UNESCO) 15	Multilingual education

Objective: RES	ILIENT		
Domain: SOCIE	TY:		
17	1.3.1	City Prosperity index CPI	Life expectancy at birth
18	1.3.2	SDG 3.4.1	Mortality rate (Diseases)
19	1.3.3	SDG 3.4.2	Suicide mortality rate
20	1.3.4	SDG 11.5.1	Population affected by hazardous events
21	1.3.5	New Urban Agenda (NUA) 37	Mortgage debt relative to GDP
22	1.3.6	SDG 2.1.2	Food Insecurity
Objective: SUS	TAINABLE		
Domain: SOCIE	TY		
23	1.4.1	SDG 11.1.1	Slum population
24	1.4.2	City Prosperity index CPI	Gini coefficient
Objective: SAF	E & PEACEFUL		
Domain: ECON	ОМҮ		
25	2.1.1	SDG 8.7.1	Children engaged in child labor
26	2.1.2	SDG 5.4.1	Time spent on unpaid domestic and care work
Objective: INCI	LUSIVE		
Domain: ECON	ОМҮ		
27	2.2.1	City Prosperity index CPI	Unemployment Rate
28	2.2.2	SDG 8.6.1	Youth not in education, employment or training (NEET)
29	2.2.3	City Prosperity index CPI	Use of Public transport
30	2.2.4	SDG 17.8.1	Internet use
Objective: RES	ILIENT		
Domain: ECON	OMY		
31	2.3.1	CPI	City product (GDP) per Capita (PPP)
32	2.3.2	SDG 4.3.1	Youth and adults in formal and non-formal education and training
33	2.3.3	OECD	Adult Population with a Qualification from a Recognized Tertiary Education Institution
34	2.3.4	SDG 17.6.1	Fixed Internet broadband subscriptions
35	2.3.5	SDG 9.3.1	Small-scale industries in total industry value added
	2.3.6	City Prosperity index CPI	Days to start a business
36	2.5.0	City i respently mack of i	Days to start a basiness

Objective: SUS	ΤΔΙΝΔΒΙ Ε		
Domain: ECON			
	2.4.1	City Prosperity index CPI	Sub-national debt
39	2.4.2	City Prosperity index CPI	Mean household income
Objective: SAF	E & PEACEFUL		
Domain: ENVIR	RONMENT		
40	3.1.1	SDG 6.3.1	Wastewater safely treated
41	3.1.2	SDG 11.6.1	Solid Waste Collection and Disposal
42	3.1.3	SDG 11.6.2	Air quality
43	3.1.4	SDG 12.4.2	Hazardous waste
Objective: INC	LUSIVE		
Domain: ENVIR	RONMENT		
44	3.2.1	SDG 11.7.1	Access to Open Public Spaces
45	3.2.2	SDG 4.7.1	Education for Sustainable Development
Objective: RES	ILIENT		
Domain: ENVIR	RONMENT		
46	3.3.1	SDG 7.2.1	Renewable energy share
47	3.3.2	CPI	Green area per capita
48	3.3.3	OECD 15.1	Change in Tree Cover
49	3.3.4	New Urban Agenda (NUA) 48	Protected Natural Areas
Objective: SUS	TAINABLE		
Domain: ENVIR			
50	3.4.1	SDG 13.2.2	Total greenhouse gas emissions per year per capita
51	3.4.2	SDG 11.3.1	Efficient Land Use
52	3.4.3	New Urban Agenda (NUA) 50	Budget on Climate Change Mitigation and Adaptation
Objective: SAF	E & PEACEFUL		
Domain: CULTU	JRE		
53	4.1.1	Culture-2030 (UNESCO) 18	Culture for social cohesion
54	4.1.2	Culture-2030 (UNESCO) 14	Cultural Knowledge
Objective: INC	LUSIVE		
Domain: CULTU	JRE		
55	4.2.1	Culture-2030 (UNESCO) 20	Access to culture
	4.2.2	Culture-2030 (UNESCO) 21	Cultural participation
Objective: RES			
Domain: CULTU			
	4.3.1	Culture-2030 (UNESCO) 7	Cultural employment
58	4.3.2	Culture-2030 (UNESCO) 1	Expenditure on heritage

Objective: SUS	ΤΔΙΝΔΒΙ Ε		
Domain: CULTU			
	4.4.1	Culture-2030 (UNESCO) 2	Sustainable management of heritage
60	4.4.2	Culture-2030 (UNESCO) 3	Climate adaptation and resilience
61	4.4.3	Culture-2030 (UNESCO) 5	Open space for culture
Objective: SAF	E & PEACEFUL		
Domain: GOVE	RNANCE		
62	5.1.1	SDG 16.1.1	Victims of intentional homicide
63	5.1.2	SDG 16.1.3	Victims of physical, psychological, and sexual violence
64	5.1.3	SDG 5.2.1	Intimate partner violence
65	5.1.4	SDG 16.3.1	Reporting of violence
66	5.1.5	SDG 16.5.2	Bribery
Objective: INC	LUSIVE		
Domain: GOVE	RNANCE		
67	5.2.1	SDG 11.3.2	Participation in Urban planning and Management
68	5.2.2	New Urban Agenda (NUA) 75	Utilization of E-Governance and Digital Governance Tools
69	5.2.3	SDG 5.5.1b	Proportion of seats held by women in sub-national/ local governments
70	5.2.4	SDG 5.1.1	Legal frameworks for equality
71	5.2.5	City Prosperity index CPI	Efficiency in urban governance
Objective: RES	ILIENT		
Domain: GOVE	RNANCE		
72	5.3.1	City Prosperity index CPI	Own Revenue Collection
73	5.3.2	New Urban Agenda (NUA) 58	Financial autonomy
74	5.3.3	SDG 11.b.2	Local disaster risk reduction strategies
Objective: SUS	TAINABLE		
Domain: GOVE	RNANCE		
75	5.4.1	SDG 16.9.1	Registered Births
76	5.4.2	SDG 11.a.1	National Urban Policies / Regional Development Plans
77	5.4.3	Culture-2030 (UNESCO) 12	Governance of culture

