

RESEARCH PAPER TOPIC: EDI IN ACTION

A COMPARATIVE ANALYSIS OF THE INTEGRATION OF EDI WITHIN THE BUILDING SECTOR STRATEGIES OF THE CLIMATE ACTION PLANS FOR CANADA'S MAJOR URBAN CENTRES

INTRODUCTION

This research paper aims to explore how social vulnerabilities have been considered through the integration of Equity, Diversity, and Inclusion (EDI) themes within the building sector strategies of the climate action plans of four of the major urban centres in Canada: Toronto, Montreal, Vancouver and Calgary. The scope of the research study covers new developments of residential buildings that are four storeys or higher, and non-residential buildings (industrial, commercial and institutional developments).

The implication of this study provides a framework for policymakers, planners, developers, and AEC practitioners, to better integrate EDI consideration into the strategies of climate action plans for the buildings sector, and other sectors critical to the low-carbon economy transition. The study is guided by the three research questions:

- RQ1** How is EDI conceptualized in the literature?
- RQ2** How can these be used as a framework to assess the building sector strategies?
- RQ3** What are the results from applying the EDI framework to the four major urban centres in Canada?

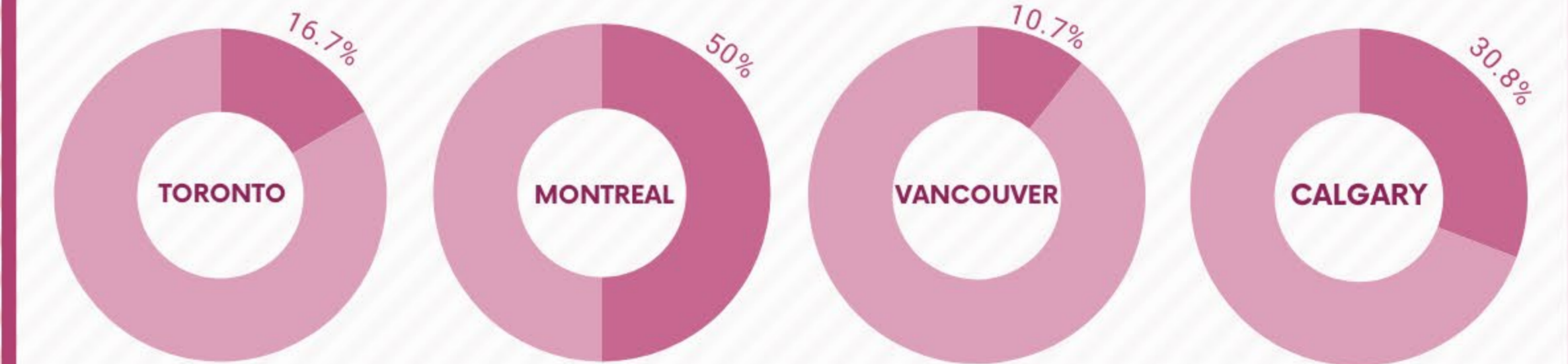
LITERATURE REVIEW

Table showing Conceptualizations of Equity, Diversity and Inclusion in climate action plans

Terms	Refined Definitions	Theoretical underpinnings
Equity	The removal and absence of systematic barriers, biases and structural injustices to enact the practice of fair and equitable treatment so that all individuals have an equal and fair distribution of opportunities, resources, and environments free from climate hazards and risks regardless of the individual/group identity or background.	Braveman & Gruskin (2003), Bernstein et al. (2020), TIPS (2021), and Chu & Cannon (2021)
Diversity	Differences in race, colour, place of origin, religion, immigrant and newcomer status, ethnic origin, sex, sexual orientation, gender identity, gender expression, age, mental or physical abilities and characteristics, educational background, geographic location, first language, family status, organizational role and level, income, and communication style.	TIPS (2021), Loden and Rosener (1991)
Inclusion	The degree to which decision-making processes and procedures are transparent, accessible, accountable, and include intersecting identities, diverse and underrepresented voices, values, and viewpoints that are treated with respect and equally supported.	Mor-Barak & Cherin (1998), Bernstein et al. (2020), Chu & Cannon (2021) and TIPS (2021)

RESULTS

The four cities' building sector strategies incorporated EDI in varying ways and degrees within the development stages of their climate action plans, the published documents, and the implementation stages. The analysis in this section focuses on the findings from the comparative analysis after the EDI evaluation framework was applied.



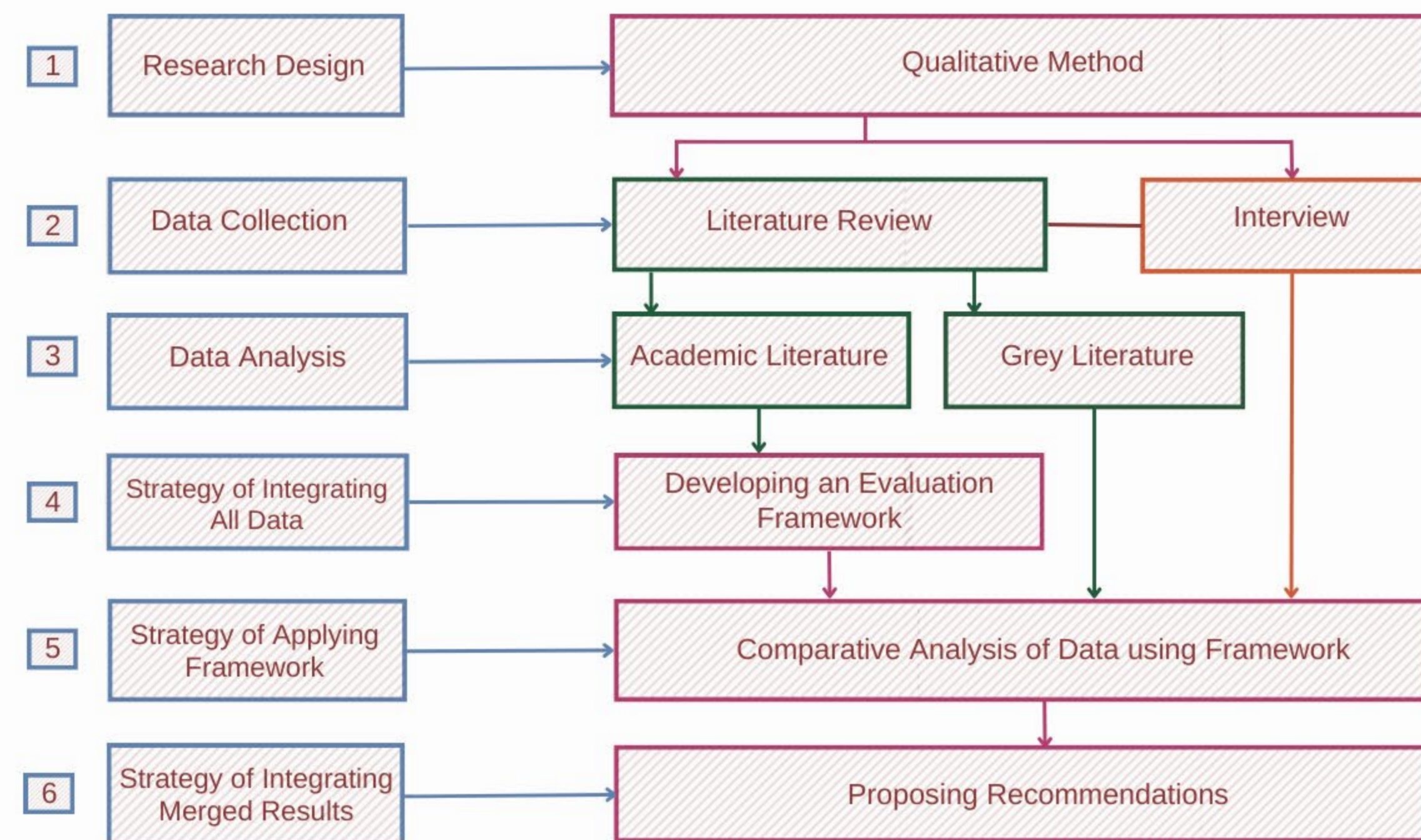
Showing the amount of building sector strategies that incorporated EDI themes (Assuming that the coverage of the building sector scope was the same across all four cities)

LEGEND

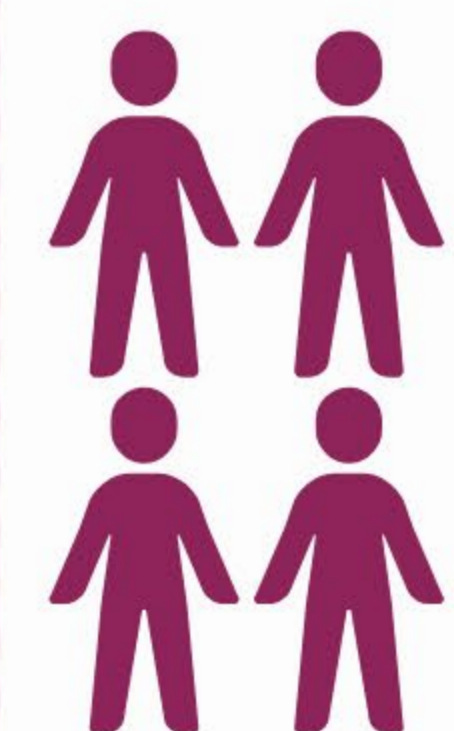
- Integrates EDI themes
- No EDI theme
- Climate justice
- Environmental justice
- Distributional justice
- Procedural equity
- Recognitional equity
- Intergenerational/Intragenerational equity
- Vulnerable populations
- Marginalized groups
- Persons with disability
- Participation/Engagement
- Accessibility
- Inclusive design

METHODOLOGY

The study uses a qualitative research method that consists of semi-structured interviews with city officials (1 Toronto, 1 Vancouver, and 2 Calgary) as the primary research, and a literature review of academic and grey literature (climate action plans) as the secondary research.



INTERVIEW QUESTIONS



The participants were chosen based on their involvements with the development of the building sector strategies. The following open-ended questions were asked to fill any information gap:

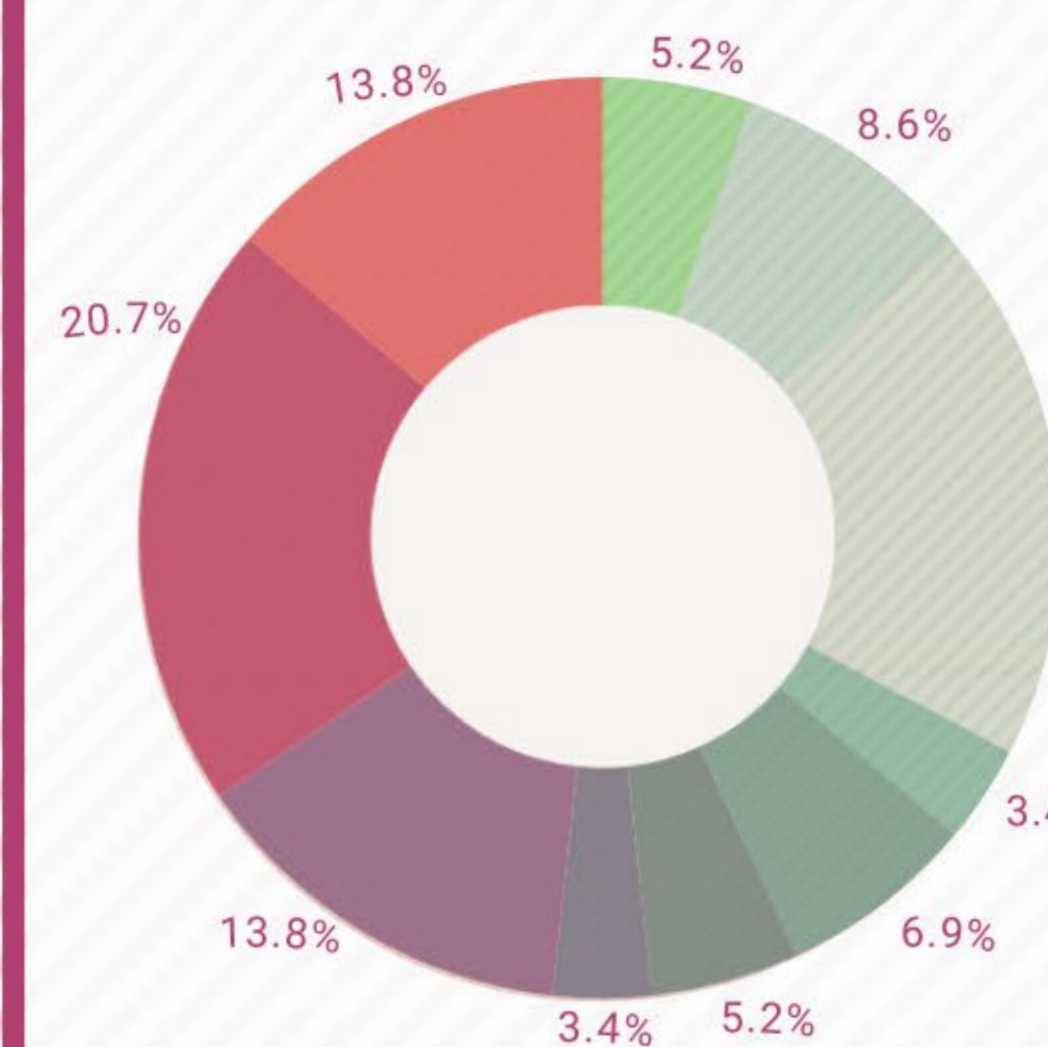
1. What is your government's mandate to incorporate EDI in the climate action plan & green building strategies, if any?
2. What is your role in facilitating this?
3. What are the barriers and opportunities to achieve the EDI goals in this sector?

EDI EVALUATION FRAMEWORK

Table showing the Equity, Diversity and Inclusion Themes and Indicators used for the Evaluation Framework

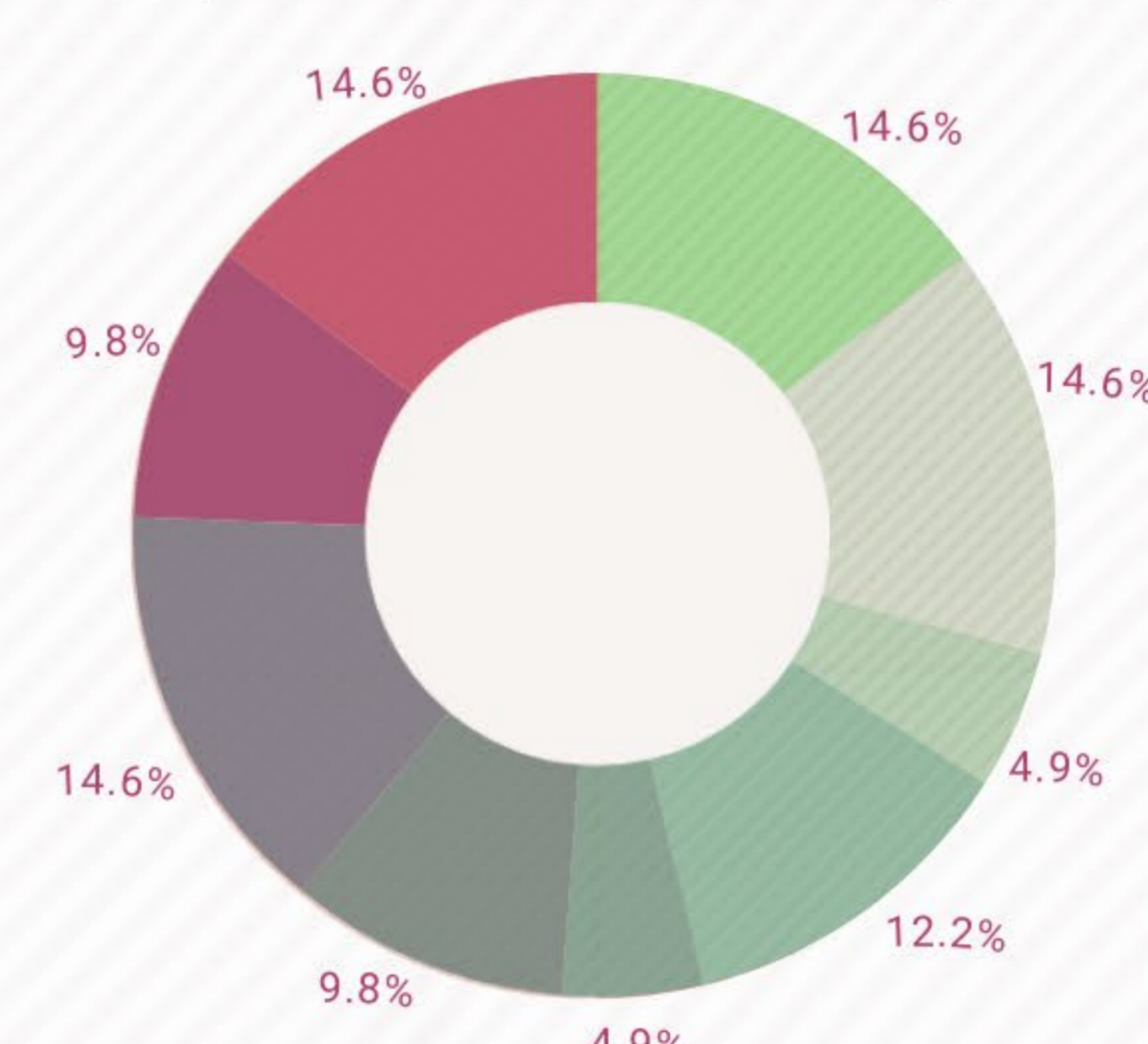
Criteria	EDI Framework	Indicators
Equity Themes	Climate justice	Statements that highlight the social dimensions of urban climate adaptations, such as the effects, outcomes or remuneration of interventions on marginalized groups or reparation it brings.
	Environmental justice	Statements that imply the intent to equally protect all people from adverse environmental and public health conditions.
	Distributional justice	Statements that suggest fair access to goods, infrastructure, amenities, services, resources and opportunities.
	Procedural equity	Statement that suggest equitable participation of underrepresented groups within the various phases of the planning and decision making processes.
	Recognitional equity	Statements that acknowledge diverse identities, recognize historical injustices impacts and promote respect for various these groups.
	Intergenerational equity	Statements that seek to protect environmental quality as an obligation to future generations.
	Intragenerational equity	Statements that consider contemporary inequities, issues and populations.
Diversity Themes	Vulnerable populations	statements that specify the targetted groups that the strategies aim to increase engagement, benefit and access to or reduce exposure to adverse climate conditions.
	Marginalized groups	statements that specify the targetted groups that the strategies aims to help remove structural aspects of inequality and systemic barriers.
	Persons with disability	statements that address disability, human rights legislation about built environment accessibility, and persons with disabilities lived experience of neighbourhood accessibility.
Inclusion Themes	Participation/Engagement	statements that highlight efforts to engage diverse groups in various processes related to the development and objectives of the climate action plan.
	Accessibility	statements that suggest measures to increase accessibility to the built environment, information and resources.
	Inclusive design/Universal design	statements that suggest ways to design for all groups.

TORONTO



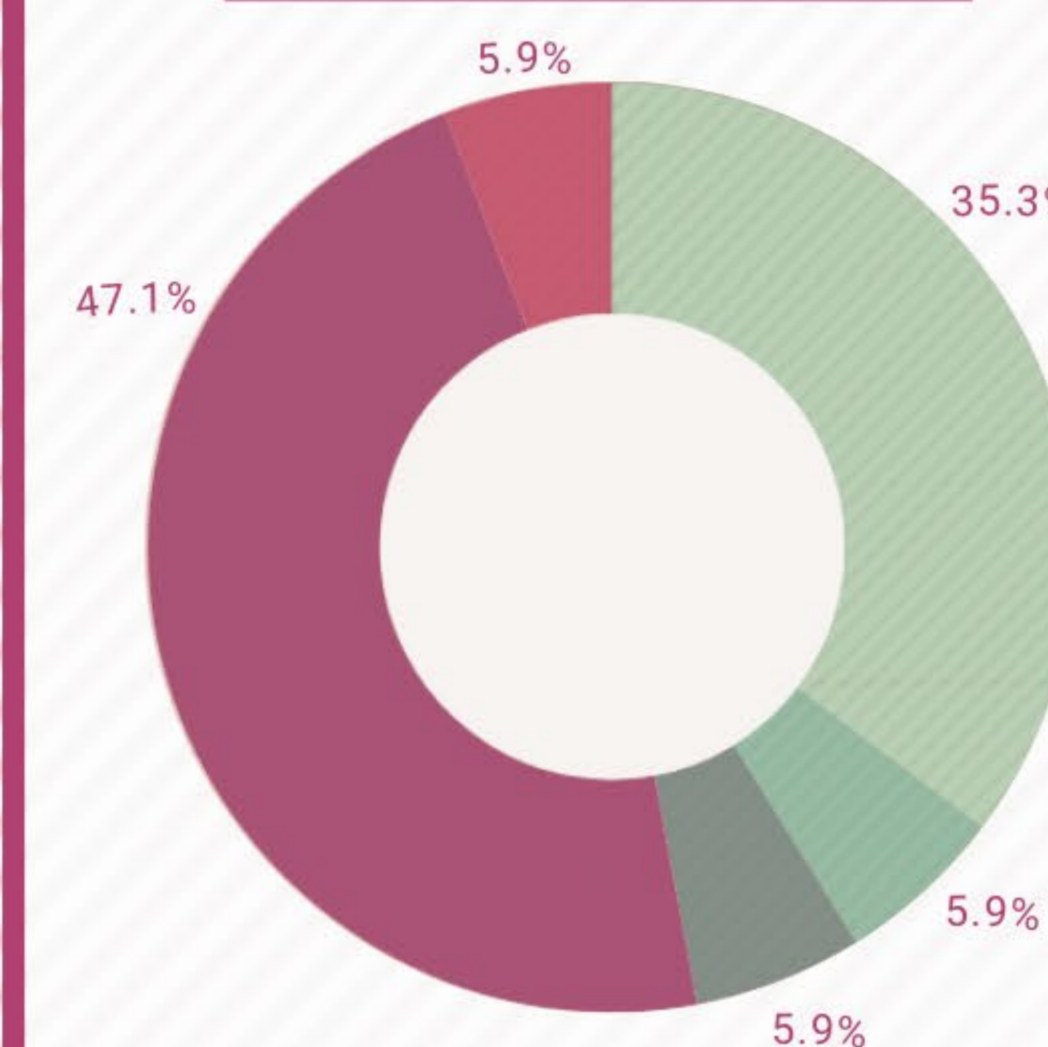
Showing the frequency and extent at which the EDI themes occurred in the Toronto Green Standard

MONTREAL



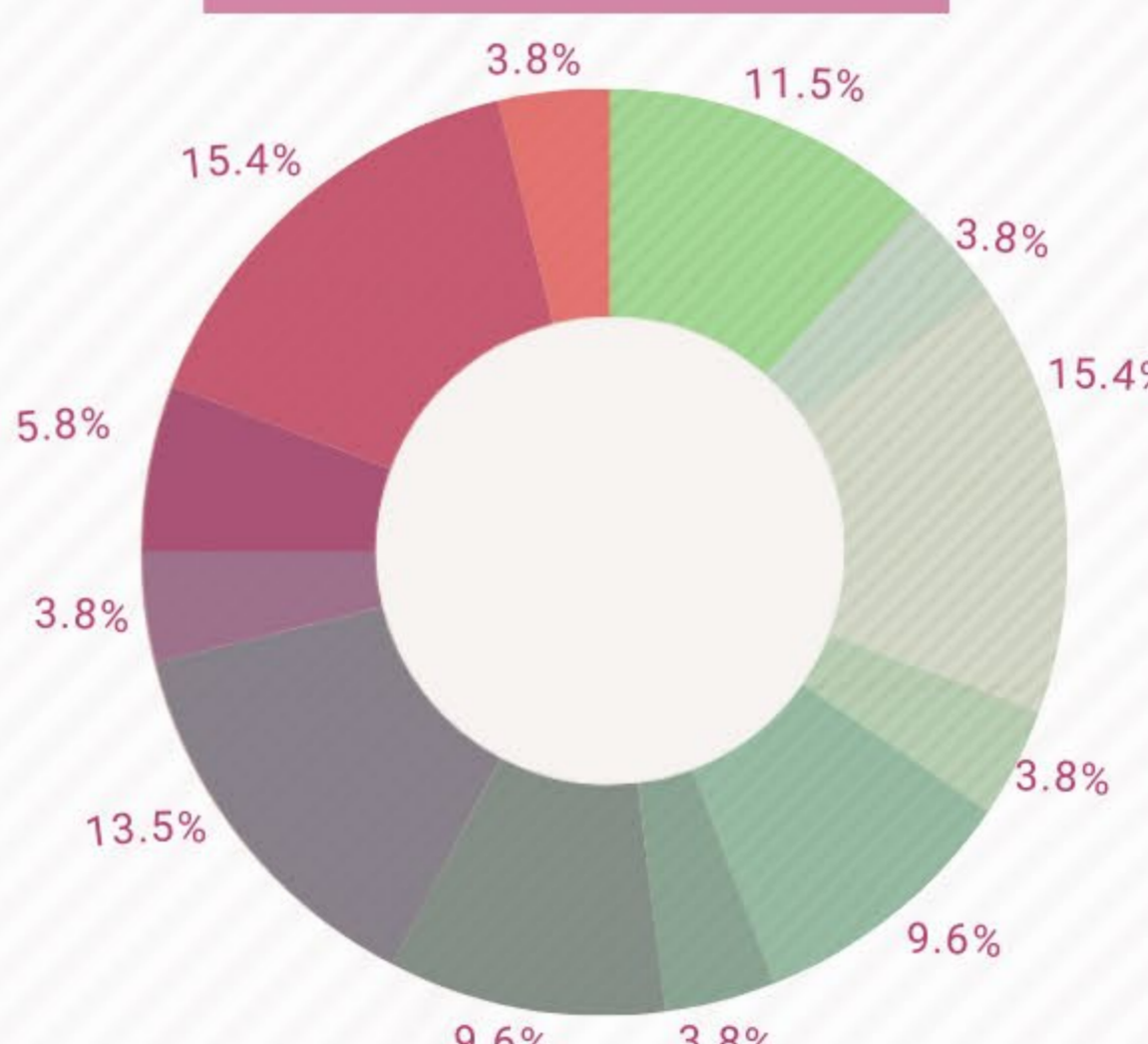
Showing the frequency and extent at which the EDI themes occurred in the Montreal Climate Plan

VANCOUVER



Showing the frequency and extent at which the EDI themes occurred in the Vancouver Zero Emissions Building

CALGARY



Showing the frequency and extent at which the EDI themes occurred in the Calgary's Climate Strategy and Implementation Plan