

Evaluating the Utilization and Influence of Environmental Impact in Public Procurement in the Toronto and Vancouver Regions



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Background

- Sustainable Public Procurement (SPP) describes it as “a process whereby public organizations meet their needs for goods, services, works and utilities in a way that achieves value (...) [for] the organization, but also to society and the economy, whilst significantly reducing, and if possible avoiding, negative impacts on the environment” (UNEP & One Planet Network 2022).
- Government can use SPP to demonstrate environmental leadership and influence industry to pursue environmentally preferable goods, services and processes (OECD, 2015).
- The Federal Government of Canada has established initiatives to “modernize procurement practices” and is reflected in the creation of the Government of Canada’s Green Procurement Policy (Uttam & Le Lann Roos, 2014; Wosk, 2018)
- Canadian municipalities are estimated to spend approximately \$200 billion on public procurement annually to support these responsibilities (Municipal World, 2020). This is equal to the buying power of the federal government.

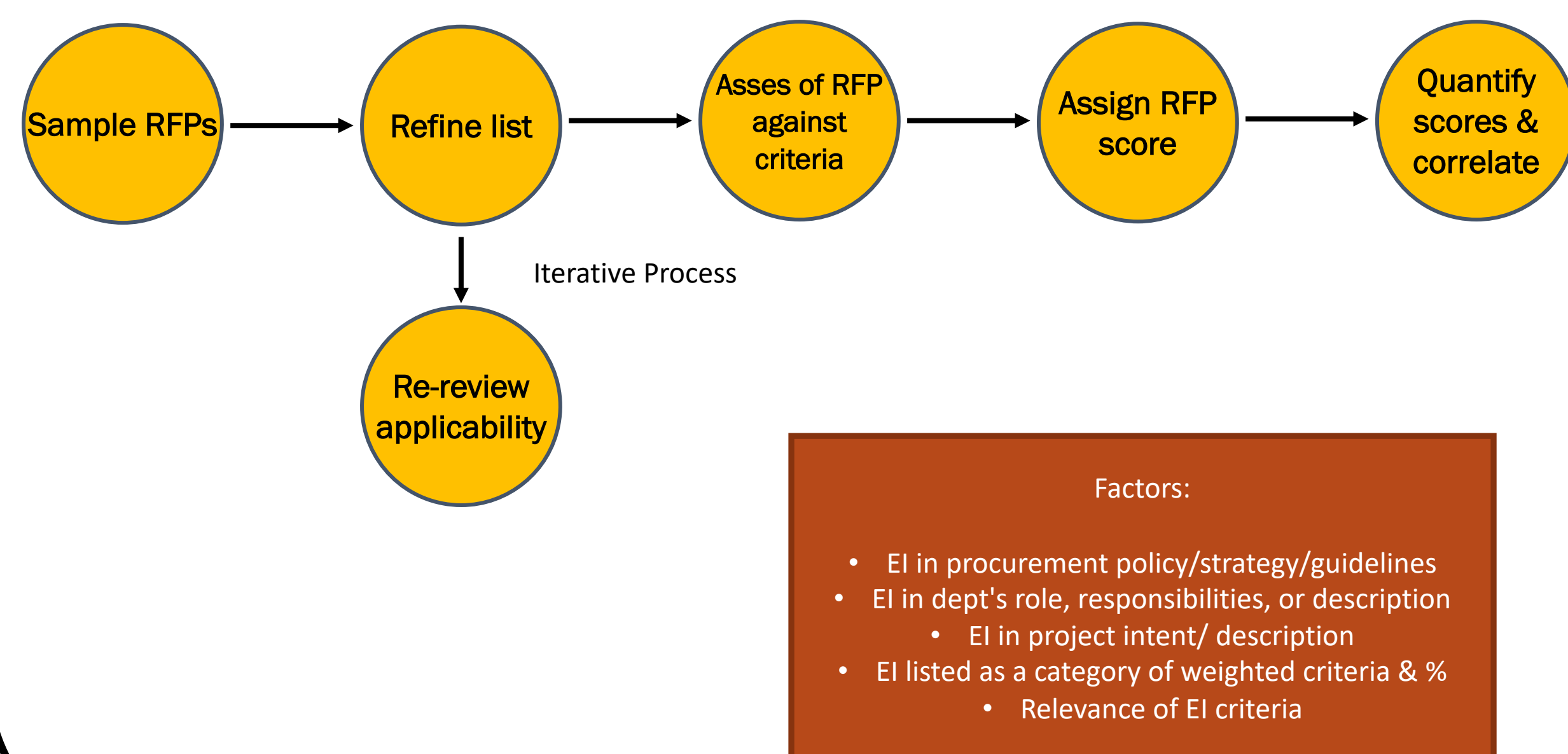
Research Objectives

To what degree do the policies and project bid documents which guide the public procurement process used by municipal governments in Canada result in more environmentally sustainable decision-making?

This question will be answered by examining whether municipal governments

- factor sustainability into their request for proposal (RFP) documents,
- what attributes and what evaluation scheme do they use?

Methodology



Results

A total of 142 documents were deemed suitable for analysis and scoring, 69 from the Toronto CMA and 73 from the Vancouver CMA. These represented the following municipalities: Ajax, Brampton, Markham, Milton, Mississauga, Richmond Hill, and Vaughan, for the Toronto CMA, and Coquitlam, Maple Ridge, North Vancouver, Port Moody, Surrey, and Vancouver.

All 13 surveyed municipalities in the Toronto CMA and Vancouver CMA considered environmental impact (EI) in the procurement process. However, at which stage in the process it was considered and what degree of influence it had varied.

Sample:

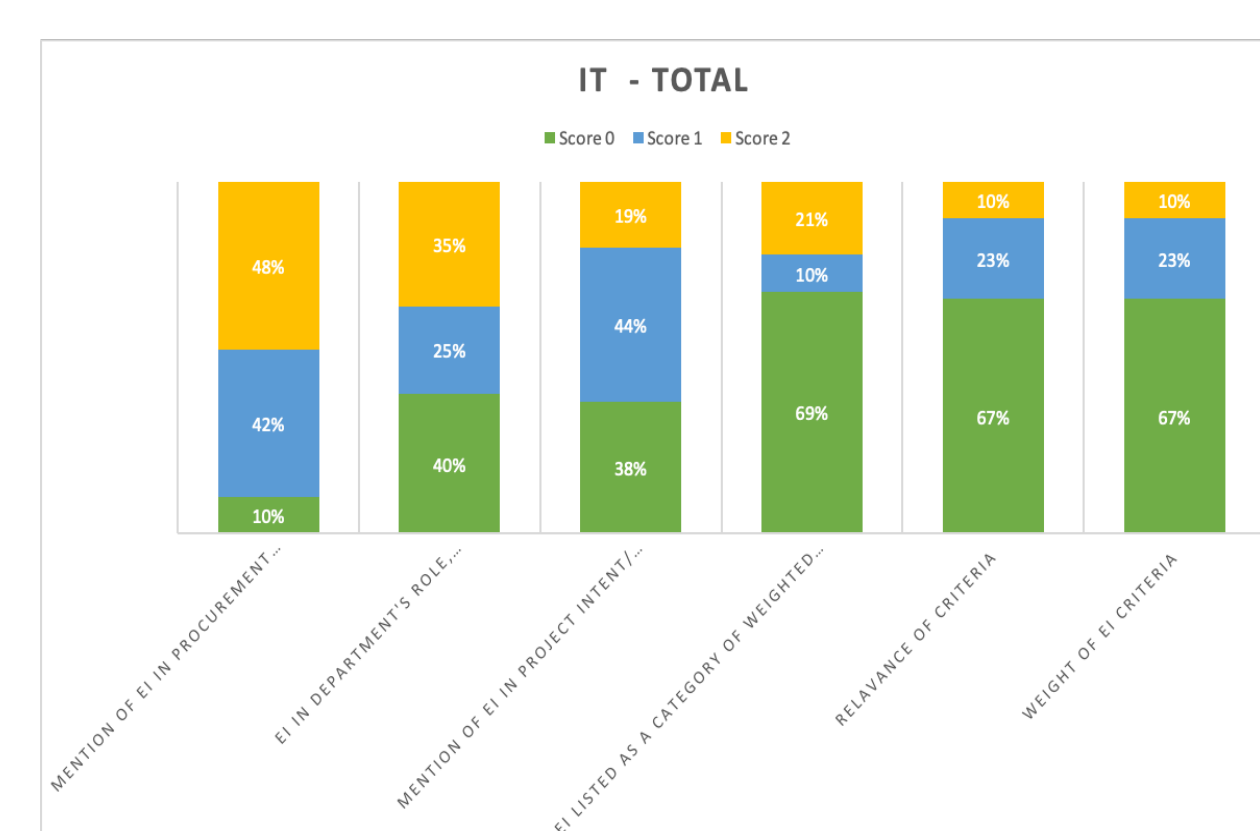
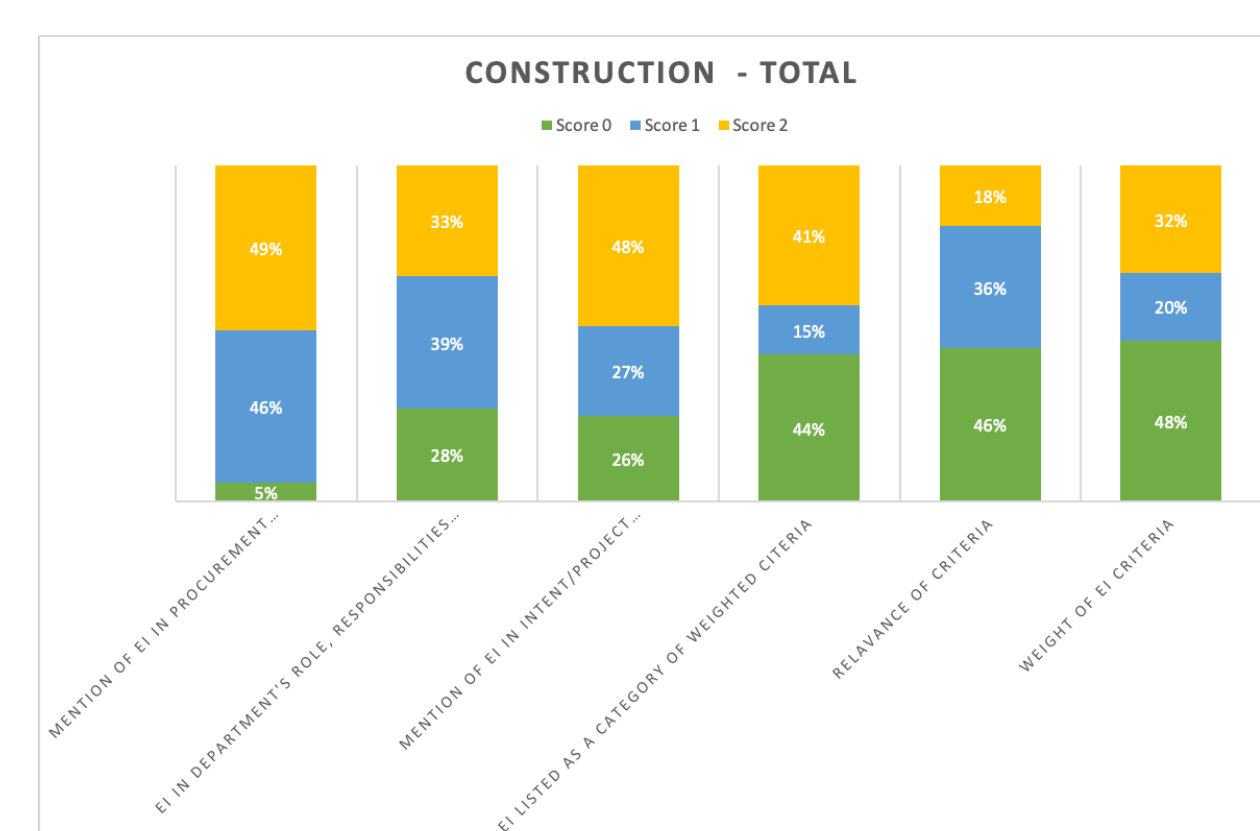
Sustainable Procurement Practices

The City will consider sustainability in its procurement processes, measure its progress and strive for continuous improvement over time. While not all sustainability aspects will be incorporated into every purchase, it is the intent of this policy that City employees will endeavour to incorporate and balance all relevant factors to the maximum extent possible.

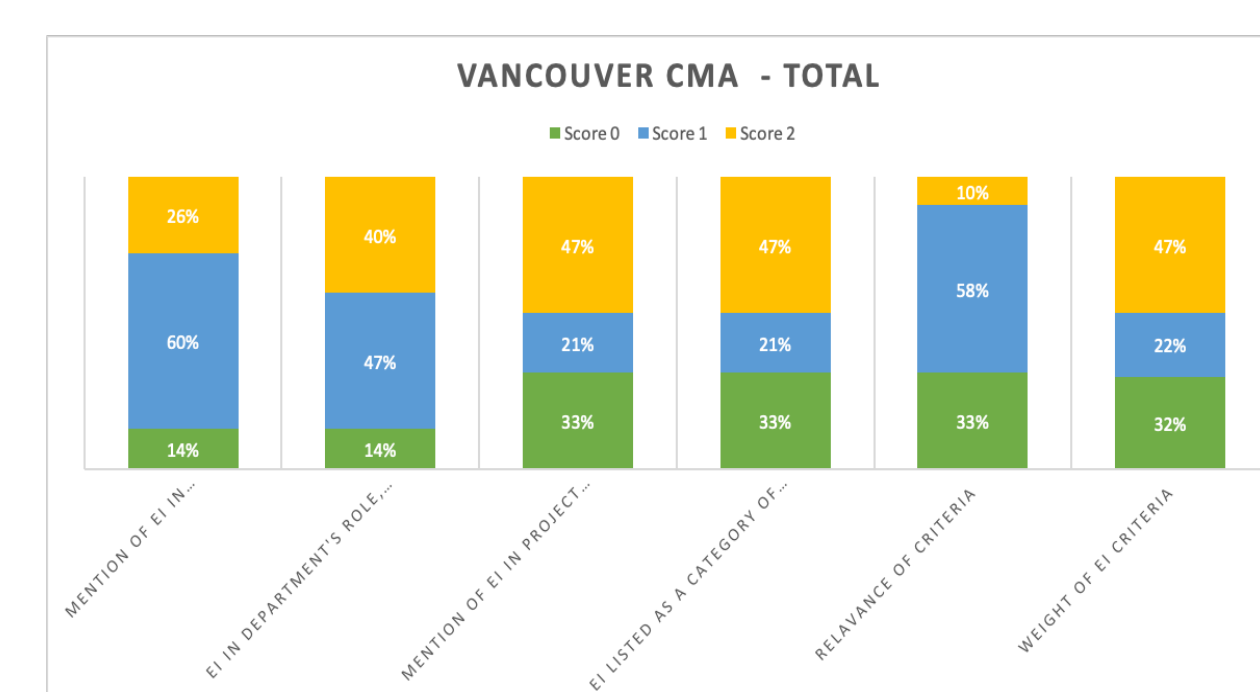
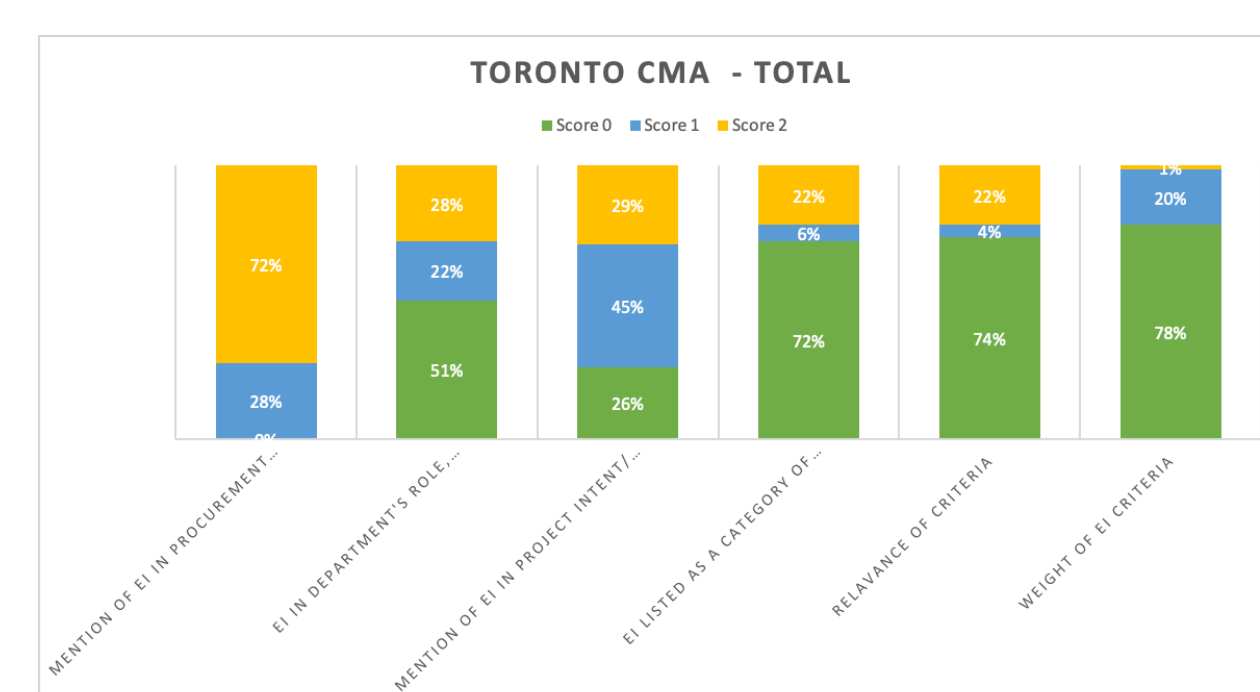
The City will consider both the lifecycle impacts of the Goods and Services that are purchased, as well as the sustainability practices of its suppliers. The sustainability aspects that may be considered for any procurement include, but are not limited to:

- Environmental aspects, including purchasing Goods and Services from suppliers that:
 - Reduce material use, waste and packaging and promote reuse, recycled content, recyclability, reparability, upgradability, durability, biodegradability and renewable products
 - Maximize energy efficiency
 - Reduce greenhouse gas (GHG) emissions and air pollution, mitigate climate change and support climate change adaptation
 - Conserve water and/or improve water quality
 - Reduce or eliminate the use of toxins and hazardous chemicals, and
 - Contribute to biodiversity preservation and habitat restoration

Topics Constituting EI Considerations in Bid Documents	
Sector	Topics
Construction	Environmental impact knowledge and certifications of project staff and/or design
	Environmental impact plan (sometimes termed "construction environment management plan (CEMP)")
	Environmental protection plan
	Use of LEED design principles and other green building certifications
	Tree, plant, and other vegetation protection plan
	Building energy performance plan
	Packaging and shipment
	Vehicle and machinery use
	Waste management plan
	Air and water pollution
Information Technology	Materials sourcing and composition
	Hazardous substances
	Product lifetime extension and warranties
	Stakeholder impacts
	Cleaning products used
	Product lifetime extension and warranties
	Energy consumption
	Hazardous substances
	Waste management plan
	Materials sourcing and composition
Ecotesting including EPEAT, Energy Star, 80 Plus, FSC.	



The construction sector was represented by 94 of the RFPs analyzed (66%) and the information technology (IT) sector was represented by 48 of the RFPs analyzed (34%). Overall, the construction sector scored more positively on all criteria as compared to IT. This can be attributed to the depth and greater relevance of EI inclusions, as well as appropriate weighting, which means there is a higher likelihood that this leads to increased EI adoption in public goods and services.



Overall, the Vancouver CMA scored more highly than the Toronto CMA on criteria which evaluated the degree of influence which EI had on the purchasing decision: listing as a category of weighting, relevance of criteria, and weight of EI criteria. As EI is influencing decision-making during the procurement process more greatly in this region, there is a higher likelihood that this leads to increased EI adoption in public goods and services.

Discussion

1. Integration of Environmental Impact Considerations in Bid Documents and their Influence on Decision-Making

- Half of RFP documents detailed evaluation schemes and assigned weighting for EI suggesting that many cases there was a limited influence on procurement decisions aimed at meeting the environmental sustainability goals outlined by the municipalities.
- Negative correlation between the criteria of “Mention in policy/strategy/guidelines and “EI in weighted criteria”, which suggests that these municipalities may be making sustainability commitments without intent on follow through or without implementation pathways to do so.
- Alternatively, it may suggest that there is a disconnect between the various authorities who develop sustainability commitments and those involved in making purchasing decisions.
- The correlation figures also suggest that some municipalities may not have the education, resources, or capacity to move being standardization and identify or detail specific case by case sustainability needs to be able to incorporate them into their RFPs. Correlation between the purchasing role and weighted EI criteria, was also mixed ranging from very high positive to very high negative. There is an opportunity for departmental and procurement professionals to increase education and accountability.

2. Sector-Specific Differences in EI Integration

- There has been significant progress in integrating EI in construction specific RFP instructions in the last decade, however, as earlier sections have highlighted EI influence on bid selection continues to lag behind.
- Correlation between “EI in project intent/ description” and “EI in weighted criteria” was low positive for the overall sector results with the Vancouver CMA showing a very high positive correlation. These encouraging results suggest that this CMA’s broad and specific criteria are impacting EI decision-making because they have been tailored for the sector and weighted appropriately.
- Although EI options exist for the IT sector as demonstrated through research and by Table X, this sector has not yet succeeded in incorporating EI fully in its RFPs. There is a potential to incorporate ecolabels such as EPEAT, Energy Star, TCO, and responsible materials sourcing, such as post-consumer recycled (PCR) plastics and packaging requirements.

3. Comparative Analysis of CMAs

- The Vancouver CMA was found to have a greater success rate at integrating EI in a manner that influences decision-making during the procurement process and lead to increased EI adoption in goods and services. Scoring results were nearly identical for “mention of EI in project intent” and “EI as a listed criteria of weighting” with a low positive correlation.
- BC incorporates a greater level of EI in procurement decisions than Ontario. BC publishes sustainable procurement guidelines and is a member of the Buyers for Climate Action (BCA) which may have implications for municipal governments within its jurisdiction.
- Greater cooperation among municipalities in the Vancouver CMA than the Toronto CMA was suggested by mention of co-operative procurement services group, for example “The City of Surrey is an active member in the Vancouver Regional Co-operative Procurement Services Group (VRCPG).

Future Research

- This research was limited to environmental impact considerations, however, several bid documents also made reference to social sustainability which is essential to a holistic approach to sustainability and is garnering increased interest from researchers.
- Another limitation of this research is that it does not assess the selection process of RFPs to analyze the purchasers’ accountability to the terms or whether negotiations take place impacting the EI of goods and services.
- Findings should be compared across a greater number of jurisdictions and at all 3 levels of government.
- A wider range of bid documents, such as RFQs and ITTs should be considered
- Insight into gaps and connects should be investigating by conducting interviews with procurement professionals