

EDI in Circular Procurement at UBC

Prepared by: Alix Mintha

Prepared for: UBC Procurement and SEEDS

The University of British Columbia

January 2025

Cover Photo: The Spruce / Nisanova Studio

Disclaimer: UBC SEEDS Sustainability Program provides students with the opportunity to share the findings of their studies, as well as their opinions, conclusions and recommendations with the UBC community. The reader should bear in mind that this is a student research project and is not an official document of UBC. Furthermore, readers should bear in mind that these reports may not reflect the current status of activities at UBC. We urge you to contact the research persons mentioned in a report or the SEEDS Sustainability Program representative about the current status of the subject matter of a report.



Executive Summary

This report explores the integration of Equity, Diversity, and Inclusion (EDI) into UBC's procurement operations to support its transition to a circular economy. Commissioned by UBC Procurement and SEEDS, the research was conducted from April 2024 to January 2025. This report addresses knowledge gaps in equitable procurement practices aligned with UBC sustainability goals, i.e. the Climate Action Plan 2030 and Zero Waste Action Plan 2030.

Objectives and Methodology

The study aimed to: assess current EDI considerations in UBC's procurement practices, identify barriers and opportunities for equitable procurement, develop actionable recommendations to incorporate EDI into circular procurement strategies.

The project involved a literature review of 30 studies, an analysis of UBC's sustainability plans, and semi-structured consultations with procurement staff (N=10). Thematic coding and qualitative data analysis was performed to analyze findings. The report proposes an 8-step framework to enhance EDI integration into circular procurement.

Key Findings

- **Current Priorities:** Budget, timelines, and requestor needs dominate procurement priorities, with limited emphasis on EDI and sustainability.
- **EDI Engagement:** While 60% of participants consider EDI, only 33% do so independently, highlighting a reliance on mandated practices.
- **Challenges:** Barriers include vague EDI guidelines, insufficient training, limited evaluation criteria, and operational overburden.
- **Opportunities:** Participants envision equitable procurement as promoting equal opportunity, transparency, and community benefits.

Conclusion

By operationalizing EDI within circular procurement, UBC can drive sustainable and socially equitable outcomes. This report underscores the importance of clear frameworks, actionable targets, and inclusive practices to ensure that procurement supports both environmental and social justice goals.

Table of Contents

Executive Summary	3
Table of Contents	4
List of Figures	5
List of Tables	5
List of Abbreviations	6
1.0 Introduction	7
1.1 Report Background	7
1.2 Goals & Objectives	7
2.0 Sustainable Procurement Background	8
2.1 Sustainability Concept	8
2.2 Circular Economy	9
2.3 Circular Procurement	9
2.4 Circular Procurement at UBC	10
3.0 Equitable Circularity Background	11
3.1 Equity, Diversity, and Inclusion	12
4.0 Literature Review	13
4.1 Strategic Implementations	13
4.2 Conceptual Implementations	14
5.0 Research Methodology and Methods	15
5.1 Research Methodology	15
5.2 Research Methods	16
5.3 Data Transcription and Analysis	17
6.0 Results	17
7.0 Discussion	21
8.0 Recommendations	23
Conclusion	27
References	28
Appendix	32



List of Figures

Figure 1. Sustainable Procurement Framework	10
Figure 2. Unified CPP Definition	13
Figure 3. Ground Theory Wheel	16
Figure 4. Currently Considering EDI Bar Graph	18
Figure 5. What Does Equitable Procurement Look Like To You Pie Chart	18
Figure 6. Challenges To Engaging With EDI Bar Chart	20
Figure 7. Familiarity With CPP Terms	20
Figure 8. Familiarity With UBC CE Initiatives	20
Figure 9. Is UBC Doing Enough Pie Chart	21

List of Tables

Table 1. Current Procurement Priorities	17
Table 2. Proposed Solutions	20

List of Abbreviations

CAP: Climate Action Plan

CE: Circular Economy

CPP: Circular Public Procurement

CCSP: Canadian Collaboration for Sustainable Procurement

EDI: Equity, Diversity, and Inclusion

EP: Equitable Procurement

GPP: Green Public Procurement

IP: Indigenous Procurement

SDG: Sustainable Development Goals

SEEDS: Social Ecological Economic Development Studies Sustainability Program

SRPP: Socially Responsible Public Procurement

SPP: Sustainable Public Procurement

UBC: The University of British Columbia

UN: United Nations

ZWAP: Zero Waste Action Plan

1.0 Introduction

1.1 Report Background

This report was commissioned by the Senior Manager, UBC Procurement Programs, and UBC SEEDS team to support ongoing work at UBC related to sustainable and circular procurement. It was decided that this report would specifically focus on equity, diversity, and inclusion in UBC's transition to a circular economy. The research and writing of this report was completed during the period from April 2024 to January 2025.

1.2 Goals & Objectives

The purpose of the Equity, Diversity, and Inclusion (EDI) in Circular Procurement project is to conduct research that can help inform an equitable transition to a circular economy at UBC. There are a number of knowledge gaps and opportunities related to how EDI considerations can factor into UBC's procurement processes related to a circular economy.

The university is working to transition to a circular economy and has signaled the need for updated procurement practices under the Zero Waste Action Plan (ZWAP) 2030: Towards a Circular Economy and the Climate Action Plan (CAP) 2030. As a preliminary action related to this transition, the EDI & Circular Procurement report will explore background knowledge of promising practices for considering EDI in circular procurement in order to create circular/sustainable procurement strategies. Research will involve an analysis of the current state of procurement at UBC from an equity lens to understand the current EDI considerations in place and for the creation of a series of recommendations promoting equity in the purchasing process. To provide sufficient context and justification for these recommendations the report is structured as follows: *1.0 Introduction, 2.0 Sustainable Procurement Background, 3.0 Equity, Diversity, and Inclusion Background, 4.0 Literature Review, 5.0 Research Methodology, 6.0 Discussion of Consultation Results, 7.0 Recommendations, 8.0 Conclusions.*

2.0 Sustainable Procurement Background

2.1 Sustainability Concept

The term "sustainability" that we use today, was first coined and defined over thirty years ago in 1987 by United Nations (U.N.) commission leader Doctor Gro Harlem Brundtland. The term was first mentioned in the now famous Brundtland Report (called 'Our Common Future') and defines sustainability as the following:

“Meeting the needs of the present without compromising the ability of future generations to meet their own needs” (Brundtland, 1987).

While this definition has been continually reworked overtime, common themes in sustainability frameworks emphasize it being a social goal aimed at balancing the welfare of the environment, society and occasionally the economy for time to come.

While this is the first time the term was conceptualized, it is important to note that by no means was this the first time this concept was "discovered" as Indigenous Peoples around the world have practiced sustainability for centuries (Recio and Hestad, 2022). It is important to recognize that understandings of sustainability are often biased towards colonial, economic, and human centric ideals that all too often centre the division between humanity and nature. In efforts to work beyond these limitations, this report will operate from an updated understanding of sustainability provided by scholar Fulvio Mazzocchi who has centred Indigenous knowledge and practices to create a new framework for understanding sustainability. This framework emphasizes the overall wellbeing of all life forms on earth and the integration of 3 Indigenous principles:

1. *Attitude of giving*: Being focused not only on taking from nature, even if in a regulated fashion. Rather, people should move to an attitude of giving back, while being constantly involved in learning how to do it, especially through the human duties in preserving the “gift”.
2. *Reciprocity and caretaking*. Promoting a two-way relationship between people and nature. People should genuinely embrace, generation after generation, the responsibility of caring for the environment, and be willing to act as guardians or stewards.
3. *Sense of interconnectedness and interdependence with nature*. A way of approaching nature that emerges—maybe even spontaneously—from perceiving an intimate kinship between people and nature, and, more generally, the universe as a complex network of relationships, that is, everything is interconnected, and no element has a real chance of existing by itself. (Mazzocchi, pg. 88).

2.2 Circular Economy

Circular Economy (CE) is an economic system rooted in sustainability frameworks that aim to promote production and consumption in a continual and circular way. Most comprehensively defined by the Ellen MacArthur Foundation in 2010:

“The circular economy is a system where materials never become waste and nature is regenerated. In a circular economy, products and materials are kept in circulation through processes like maintenance, reuse, refurbishment, remanufacture, recycling, and composting. The circular economy tackles climate change and other global challenges, like biodiversity loss, waste, and pollution, by decoupling economic activity from the consumption of finite resources.”

Along with this definition, the Ellen MacArthur Foundation discusses three foundational principles that inform CE practices: 1) eliminate waste and pollution, 2) circulate products and materials, and 3) regenerate nature (2019).

CE frameworks attempt to reimagine our current “linear” and environmentally harmful economic models and modes of production by moving beyond its “take-make-waste” configuration. This is done through the attempt to “close the loop” and thus circulate materials to center a “reduce-reuse-recycle” model instead (Ellen MacArthur Foundation, 2019).

2.3 Circular Procurement

In recent years, public procurement has been recognized as a potential catalyst in the transition to a CE. Research highlights its potential to drive CE initiatives by functioning as a market-based tool to achieve key environmental and social outcomes. By creating demand for sustainable solutions, public procurement can help establish markets that support CE goals (Fuentes et al., 2022). The idea that procurement can act as a driver for environmental change has been discussed for many years, most notably in the UN Sustainable Development Goals (SDGs). The SDGs are a collection of 17 goals aiming for “peace, prosperity, and sustainability for people and the planet” adopted by all UN member states in 2015. Out of these 17 goals, target 12.7 is directly aimed at procurement: “Promote public procurement practices that are sustainable, in accordance with national policies and priorities” (UN SDGs, 2015).

Within the public procurement industry in Canada, circular procurement has shown up primarily in discussions around sustainability. Sustainable procurement is often discussed as an umbrella term which circular procurement falls under. The Canadian Collaboration for Sustainable Procurement (CCSP) provides a well referenced and accepted definition of sustainable procurement which exemplifies this:

“Sustainable Procurement (SP) embeds relevant sustainability considerations into processes for selecting goods/services and suppliers, alongside traditional considerations like price,

quality, service, and technical specifications. It is a broad umbrella term under which most sustainability issues that relate to procurement can be nested, including environmental, social, Indigenous and ethical considerations.” (CCSP, 2023).

In this way, circular procurement can be imagined as an extension of sustainable procurement existing alongside other important frameworks like social, Indigenous, and ethical procurement.

In scholarly publications, a similar theme takes place. Two frameworks have been developed to integrate CE principles into public procurement: Circular Public Procurement (CPP) and Green Public Procurement (GPP):

Green Public Procurement (GPP): is a process where public authorities procure goods, services, and works with reduced environmental impacts throughout their life cycles (Alhola et al., 2018). This involves integrating ecological criteria into supplier selection processes to ensure certain environmental performance criteria are met and to supply public institutions with environmentally friendly products. (Nikolaou et al., 2022).

Circular Public Procurement (CPP): is an “approach to procurement that fosters environmental sustainability by contributing to closed energy and material loops within supply chains whilst minimising negative environmental impacts along the whole product life-cycle with the aim to promote social equity and justice in the society.” (Gyori, 2022, p. 1250).

While there exists many definitions and alternate understandings of circular and sustainable procurement, they are often represented under this umbrella framework. With GPP and CPP falling under the scope of sustainable procurement and occasionally used interchangeably. The extent to which they are similar and independent of one another is largely contested and will be further discussed in literature review section.

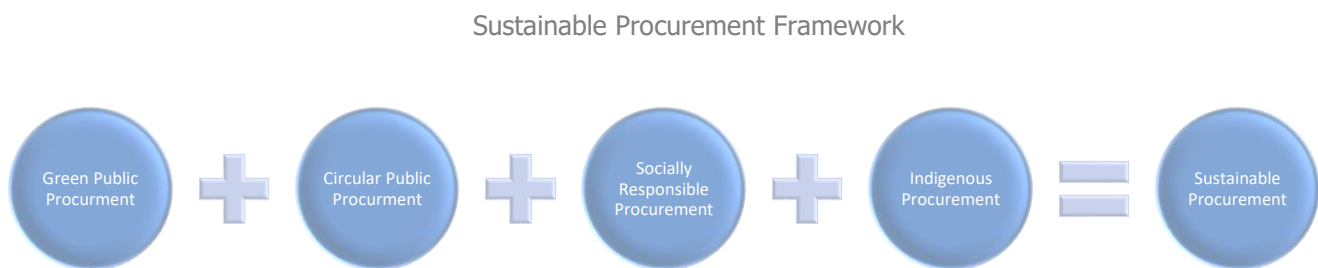


Figure 1. Sustainable Procurement Framework

2.4 Circular Procurement at UBC

UBC has undertaken many initiatives to transition to a circular economy. This section will list the relevant plans, with more information in appendix A. The relevant UBC Sustainability Action Plans are a series of 6 documents that outline the “vision, goals and targets for sustainability initiatives”

(UBC, 2024). These documents are useful references in understanding how sustainable procurement activities could fit into larger campus initiatives. The following three are most relevant to EDI and CPP:

- Climate Action Plan 2030 (CAP2030)
 - Key climate targets are mentioned including a goal of net-zero operational emissions by 2035.
 - Sustainable procurement is directly mentioned under “Food Systems” and “Waste and Materials” headings.
- Zero Waste Action Plan
 - This plan most directly relates to sustainable procurement initiatives.
 - There is a direct call to implement a sustainable procurement plan: “Scope and develop a sustainable/circular purchasing strategy and program that could include vendor and product sustainability criteria, packaging requirements, updated procurement guidelines and processes, and integration with Workday, and other procurement processes” (P. 10).
- Indigenous Strategic Plan
 - The Indigenous Strategic Plan sets out a series of eight goals and 43 actions the university will collectively take in order to advance our vision of becoming a leading university globally in the implementation of Indigenous peoples’ human rights (UBC, 2020).
 - Action 23: “Implement an Indigenous procurement strategy which prioritizes the provision of goods and services from Indigenous businesses and vendors.” (pg. 30).

3.0 Equitable Circularity

One of the guiding principles of this research is the understanding that what is sustainable, or circular, is not always equitable. The pursuit of environmental welfare can often, if left unchecked, be short-sighted and sometimes disregard that the welfare of all living beings and the planet are deeply intertwined and diverse. Applying this limited analysis to sustainability creates outcomes that often reproduce unjust structures and create disproportionate results. Neglecting that the climate crisis systematically impacts people differently produces an environmentalism for some at the cost of others. To overcome this, activists and scholars alike emphasize the importance of integrating intersectionality into environmentalism. A term first coined by scholar Kimberlee Crenshaw in 1989:

“Intersectionality is a metaphor for understanding the ways that multiple forms of inequality or disadvantage sometimes compound themselves and create obstacles that often are not understood among conventional ways of thinking.” (pg.149)

Activists have woven Crenshaw’s intersectionality with their own equitable environmentalist practices, forming intersectional environmentalism which “aims to bridge the gap between injustices committed against marginalized communities and the earth and how they are related”, while calling attention to the inequalities experienced by all racialized people and how environmental issues overwhelmingly overlap and affect these communities (Thomas, 2022). When it comes to circular economy discourse, the question of equity becomes increasingly important,

and we must ask ourselves: which parts of this world do we wish to circulate? And from that: our goal is to pursue circularity which provides an opportunity for inclusion for all peoples – a circular system which does not perpetuate historical marginalization.

3.1 Equity, Diversity, and Inclusion

Equity, Diversity, and Inclusion (EDI) is a conceptual and organizational framework that seeks to promote the fair treatment and full participation of all people in an organization. The UBC Equity and Inclusion Office defines EDI as the following (2024):

Equity: refers to achieving parity in policy, process, and outcomes for historically, persistently, or systemically marginalized people and groups while accounting for diversity. It considers power, access, opportunities, treatment, impacts and outcomes, in three main areas:

- Representational equity: the proportional participation at all levels of an institution;
- Resource equity: the distribution of resources in order to close equity gaps; and
- Equity-mindedness: the demonstration of an awareness of, and willingness to, address equity issues.

Diversity: differences in the social identities and lived experiences and perspectives of people that may include race, ethnicity, colour, ancestry, place of origin, political belief, religion, marital status, family status, physical disability, mental disability, sex, gender identity or expression, sexual orientation, age, class, and/or socio-economic situations.

Inclusion: is an active, intentional, and continuous process to address inequities in power and privilege, and to build a respectful and diverse community that ensures welcoming spaces and opportunities to flourish for all.

When it comes to circular procurement EDI often shows up in social procurement frameworks, particularly socially responsible public procurement (SRPP), Indigenous procurement (IP), and Ethical Procurement (EP). These frameworks are organized very similarly to sustainable procurement, with SRPP acting as an umbrella term with IP and EP providing more specified targets.

SRPP: is defined as an umbrella definition for procurement used to create a positive social impact, particularly by considering human rights, labour rights and safety, ethical global labour practices and the fight against bond or child labour (Gyori, 2022).

IP: “Promotes reconciliation through contracting and subcontracting Indigenous businesses; increasing employment and skills development opportunities for Indigenous peoples.” (CCSP, 2021).

EP: Involves reducing ‘sweatshop labour’ by setting workplace standards for suppliers and subcontractors. This involves assessing compliance with international conventions against child labour, forced labour, and employment discrimination and centering a human rights approach (CCSP, 2021)

4.0 Literature Review

4.1 Strategic Implementations

Scholars argue that current Circular Economy (CE) frameworks are too vague and unrealistic for practical, day-to-day implementation. As noted by scholar Gabriella Gyori (2022), there is no commonly agreed upon or universally understood definition of CE:

“Some definitions focus on the environmental facet of CE, waste minimization, longer product life cycles, value creation (EU Commission 2015; Ellen MacArthur Foundation 2015). Other definitions suggest a broader interpretation of CE and include a social dimension and human well-being as the primary goal.” (pg.1246)

Scholars have argued these vague definitions contribute to a gap between CE theory and practice, producing sufficient challenges in translating CE ideas into day-to-day operations (Hira & Au-Yeung, 2023; Fuertes, Vanacore & Hunka, 2022; Karaca et al., 2024). Research has argued that this translation gap has created insufficient CE implementation because of the vague frameworks and various understandings (Hira & Au-Yeung, 2023; Fuertes Giné, Vanacore & Hunka 2022).

Scholars argue the need for a consensus definition of CE that is clear, concise, and universally accepted (Gyori, 2022). This proposed definition would include plain language and aim to present a concept that is realistic and attainable, as scholars cite difficulties translating CPP into achievable goals and targets (Hira & Au-Yeung, 2023). Additionally, to mitigate the various definitions and sub-definitions (social, environmental, Indigenous, etc.) scholars instead point towards a singular all-encompassing definition for CPP. One that includes the environmental and social efforts of CE within the CPP mission, simplifying CPP by moving away from the current umbrella framework that offers numerous separate definitions. Scholars point out that condensing and unifying CE and its various sub-initiatives (social, environmental, Indigenous, etc.) into one framework will help reduce complications in the future (Fuertes Giné, Vanacore & Hunka 2022; Hira & Au-Yeung, 2023).

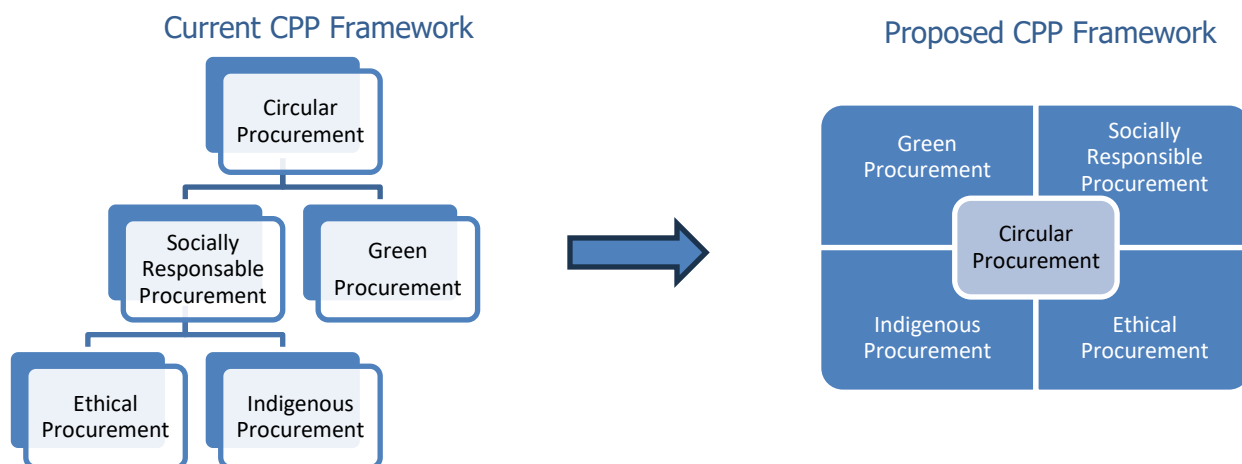


Figure 2. Unified CPP Definition

To further enhance the uptake of CE practices on the operational level, scholars recommend developing CE frameworks in collaboration with local stakeholders and procurement officials. They identify collaboration as a key factor for success in CE initiatives, additionally creating a location-specific CE initiative yields positive results. Scholars suggest implementing CE training sessions with stakeholders, establishing clear location-specific metrics, and setting achievable targets and incentives to ensure effective implementation. Scholars Karin Bradley and Ola Persson's 2022 study on repair projects reveals CE initiatives are most successful when they are micro-pilot projects with specific achievable aims and room to pivot as opposed to largescale set initiatives. Furthermore, research demonstrates CE initiatives are more effective when tailored to the specific needs of a location and team, rather than using a generic, one-size-fits-all approach. By working directly with professionals in the relevant procurement fields, these initiatives are designed to address the unique requirements and challenges of each location and procuring industry (Hira & Au-Yeung, 2023; Alhola, et al., 2018; Giné, Vanacore & Hunka 2022; Karlovesk et al., 2023; McLennan & Schleemann, 2021).

4.2 Conceptual Implementations

To successfully implement Equity, Diversity, and Inclusion (EDI) in Circular Economy (CE) procurement, scholars advocate for a reimagining of current circular procurement frameworks. Current circular procurement frameworks often lack a focus on social welfare in their definitions and goals. Scholars highlight the need to incorporate gender equality, human rights, fair employment, and anti-discrimination measures into all circular procurement frameworks (Gyori, 2022; Rathi, Vörösmarty & Tátrai 2023; Fairbrother & Banks 2023; Ortega & O'Brien, 2018). They emphasize the need to move away from corporate-led, profit-focused circular procurement movements. Multiple studies indicate that true EDI in circular procurement arises from adopting a humanist, people-first initiative (Nogueira & Wallig, 2022; Wuyts & Marin, 2022; Martinez-Alier, 2021). Examples of humanist CEs are found in Rosenbaum and Kehdy's 2022 research, which highlights micro CE projects in Lebanon that focus on social justice, well-being, and ecological sustainability, the authors discuss Regenerate Lebanon (2019-2020), post Garbage Crisis micro CE (2015-2016), Mouneh food preservation, and the Post-Beirut Blast (2020) Recovery Efforts all of which are detailed in appendix B.

Scholars Sebastain Carenzo, Paula Juarez, and Lucas Becerra's 2022 research on Argentinian grassroots circular recycling projects found that mainstream CE models often reinforce existing inequalities by privileging corporate-led, formalized recycling operations over grassroots, community-based efforts. The authors argue this privileging reinforces economic inequality and environmental degradation as opposed to minimizing it as it essentially reproduces our current economic model instead of producing a sustainable one. Building on Carenzo, Juarez, and Becerra's work, scholars and researchers Rachel Rosenbaum and Joslin Kehdy (2022), who studied community CE initiatives in Lebanon recommend fostering a "CE from below" emphasizing the importance of addressing power dynamics, leveraging local inclusion and ancestral knowledge, and centering human and environmental well-being in CE designs to achieve the desired socio-ecological outcomes. This requires reevaluating CE initiative's goals to prioritize a degrowth and sustainable approach, ultimately aiming for human welfare rather than profits (Rosenbaum &

Kehdy, 2022; Carenzo, Juarez & Becerra, 2022; Nogueira & Wallig, 2022; Wuyts & Marin, 2022; Martinez-Alier, 2021).

Collaboration and inclusion have proven effective in implementing EDI in circular procurement. Scholars Wendy Wuyts and Julie Martin's 2022 study argues that circularity has been practiced by marginalized communities throughout history, emphasizing the importance of acknowledging and integrating these longstanding communal practices into current macro circular procurement projects (2022). Furthermore, labor rights must be emphasized in circular procurement initiatives, with scholars Peter Fairbrother and Marcus Banks recommending collaboration with unions and local labor rights organizations to ensure equitable employment for stakeholders (2023). Greater supplier diversity is also needed in circular procurement. Scholars Andrea Sordi, Wendy Tate, and Feiga Huang stress the importance of expanding supplier diversity to include more micro and small business enterprises in procurement contracts (2022). These studies find that for CPP to be truly ethical, diverse, and inclusive, collaboration, and recognition at all stages of the supply chain are crucial (Wuyts & Martin, 2022; Fairbrother & Banks, 2023; Sordi, Tate & Huang, 2022).

By integrating these principles and approaches, this literature review shows circular procurement can effectively prioritize human welfare, sustainability, and inclusivity. Figure 2 (above) was created to help illustrate the relationship between these concepts.

5.0 Research Methodology and Methods

5.1 Research Methodology

This project employed a qualitative research methodology, which is an “umbrella” concept encompassing various forms of inquiry, methods, and theoretical techniques. More specifically qualitative research methods deal with the quality (the explanatory potential) of data rather than the quantity to explain research inquiries, often relying on larger open-ended questions such as why, how, and what. University of Toronto (2018) defines qualitative methodology as the following:

“The most fundamental characteristic of qualitative research is its express commitment to viewing events, action, norms, values, etc. from the perspective of the people who experience them in everyday life” (Bryman, 2004: p. 61).

The application of qualitative methodology is divided into several approaches, for this project grounded theory was utilized. Grounded research is different from experimental research or quantitative inquiry as it does not need a hypothesis (theory) to begin the research. Instead, grounded theory relies on an evolving hypothesis based on facts and evidence discovered during each stage of the study. Additionally, grounded research does not require a preconceived

understanding of events, in this context UBC procurement operations, to begin the qualitative research (Olshansky, 2014, pg.6)

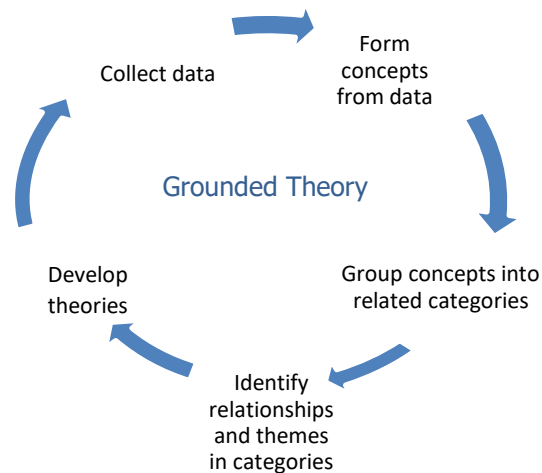


Figure 3. Grounded Theory Wheel

5.2 Research Methods

This section will outline the primary and secondary data collection methods along with the research philosophies and methodologies employed in the project.

Secondary Data Collection Research Methods

Secondary data collection refers to gathering data that was already collected by someone else to better familiarize yourself with the research topic, context, and existing literature. For this project the following secondary data was collected by:

- Conducting a review of related UBC Plans including the Indigenous Strategic Plan, Wellbeing and Inclusion Action Plan, Zero Waste Action Plan 2030: Towards a Circular Economy, and the Climate Action Plan 2030 to identify strategic priorities, targets and actions that relate to procurement.
- Reviewing literature on sustainable/circular procurement, critiques of the circular economy idea, circular economy transitions with a focus on equity considerations, EDI considerations in procurement processes.

Primary Data Collection Research Methods

Primary data collection refers to the collection of original data for research purposes. For this project primary data was collected with the aim to conduct an end-to-end review of the UBC procurement experience from an equity lens to understand the current state of equity considerations in the procurement process.

The method selected for this objective was semi-structured consultations with procurement operations officials at UBC. The consultations took place with buyers (procurement officers), requesters (UBC Staff Members), and vendors to determine: the equity considerations made at

each step in the process, the form(s) they take, and the barriers to considering equity, to ultimately create tailored recommendations.

Ten responses were received and consultations were conducted between September 23rd and October 25th, 2024. From initial contact the following study characteristics were formalized:

- Sample Size 10 (N=10)
- Response rate (RR) 10 out of 12 participants contacted (RR= 83.33%)
- The consultations consisted of eight questions with flexibility to ask follow-up questions as needed. The questions were designed to determine the current state of EDI considerations in sustainable procurement at UBC, as well as to identify gaps and opportunities to support updates to the University’s procurement processes. The full list of questions is available in appendix C.

5.3 Data Transcription and Analysis

Consultations were recorded, transcribed, anonymized, and uploaded to Nvivo where they were thematically coded. Thematic analysis is useful for identifying patterns and themes in order to extract meaning from the data. (Sovacool et al., 2023, pg. 3-4). Each transcript was coded (organized) thematically by reviewing each research question and grouping responses into organizational clusters to infer patterns and relationships between themes. These themes were then used to develop recommendations for EDI in CE based on participant responses.

6.0 Results

RQ1: Current Top Priorities

Current Priorities	Responses	Percentage
Budget	6	60%
Timeline	5	50%
Requestor Needs	4	40%
Evaluation Criteria	3	30%
EDI	2	20%
Sustainability	2	20%
Preferred Vendors	1	10%
Risk	1	10%
UBC Guidelines	1	10%

Table 1. RQ1 Current Procurement Priorities Table

The first research question asks: “what are procurement official’s current top priorities when procuring goods or services?”

Participants provided various responses which are listed in order from most popular to least popular: Budget (6), Timeline (5), Requestor Needs (4), Evaluation Criteria (3), EDI (2), Sustainability (2), Preferred Vendors (1), Risk (1), UBC Guidelines (1).

RQ2: Current Consideration of EDI:

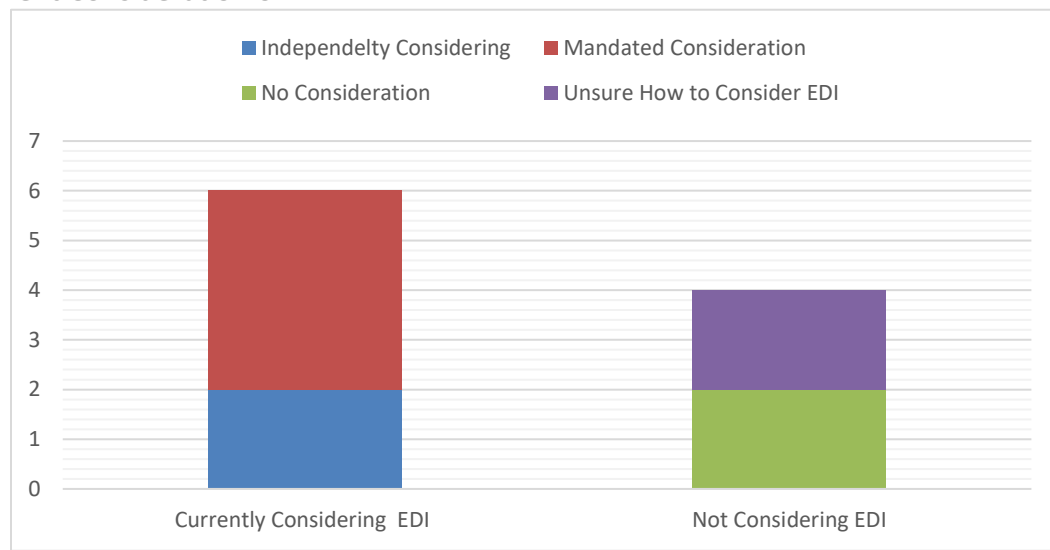


Figure 4. RQ2 Current Consideration of EDI Bar Chart

The second research question asked participants: “are you currently considering EDI when procuring goods or services?”

This question was asked to gauge participants current engagement with EDI. The results show that a majority of participants are considering EDI when procuring goods and services with a response ratio:

6:4 or 60% (Yes) 40% (No)

When analysed further responses show out of the 60% of participants engaging with EDI, the majority are doing so because it is a compulsory part of their role. When asked, 4/6 of those who responded “yes” consider EDI because it is mandatory, while the other 2/6 consider EDI on their own accord. Out of the 40% of participants who responded “No” to engaging with EDI when procuring goods or services, 2/4 participants said they do not currently consider EDI because they “do not know how”.

RQ3: What does equitable procurement look like to you?

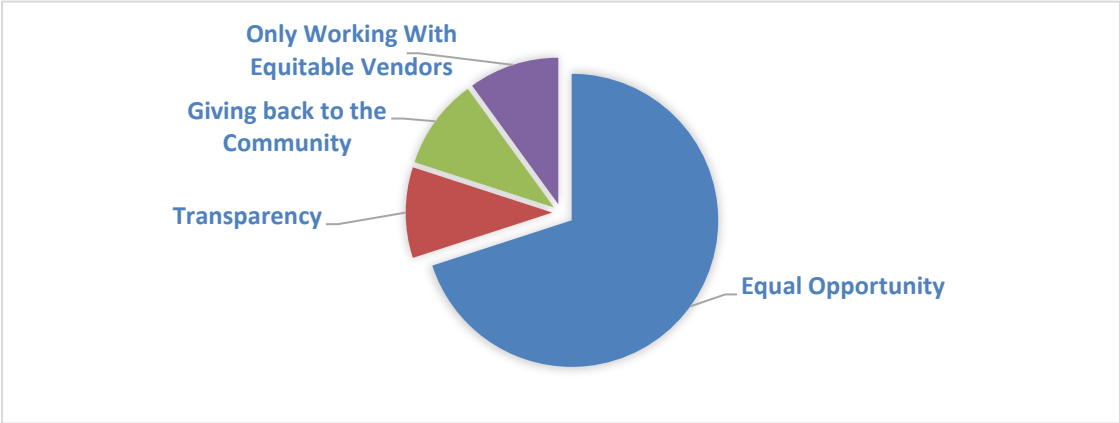


Figure 5. RQ3 What does equitable procurement look like to you Pie Chart

The third research question asked: “what does equitable procurement look like to you?”

In order from most popular response to least, participants envision equitable procurement as the following: Equal Opportunity (7), Transparency (1), Giving back to the Community (1), An Equitable Vendor Pre-Approval Program (1).

RQ4: Challenges to Engaging with EDI?

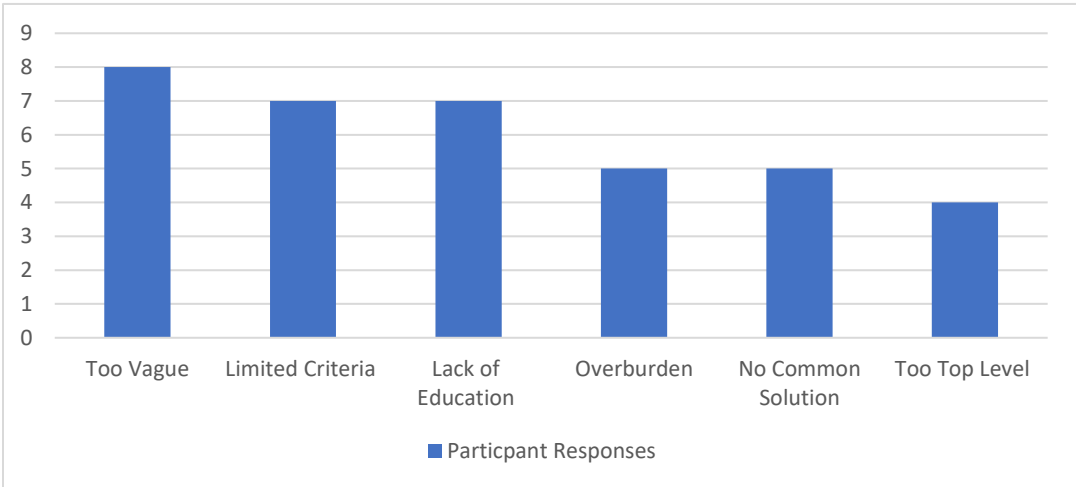


Figure 6. RQ4 Challenges to Engaging with EDI Bar Chart

Research Question 4: “Challenges to engaging with EDI”, seeks to understand current barriers to engaging with EDI in procurement for operations staff.

From most popular to least popular responses, participants stated current challenges are: Too Vague (8), Limited Criteria (7), Needs Education (7), Overburden (5), No Common Solution (5), Too Top Level (4).

RQ5: Proposed Solutions?

Proposed Solution	Responses	Percentage
Better Operationalization	7	70%
EDI Vendor Database	4	40%
Common Approach	4	40%
Specialized Training	4	40%
Specific Metrics	2	20%
Higher EDI Scoring	2	20%
Expanded EDI Criteria	1	10%
Annual Report	1	10%
EDI Human Resources	1	10%
Equitable Vendor Pre-Approval Program	1	10%

Research question five asks participants their “proposed solutions” to their challenges engaging with EDI in their procurement work.

Participants proposed the following solutions from most popular to least popular responses: (7) Better ¹Operationalization, (4) EDI Vendor Database, (4) Common Approach, (4) Specialized Training, (2) Specific Metrics, (2) Higher EDI Scoring, (1) Expanded EDI Criteria, (1) Annual Report, (1) More EDI Human Resources, (1) Equitable Vendor Pre-Approval Program

RQ6: Familiarity with Terms:

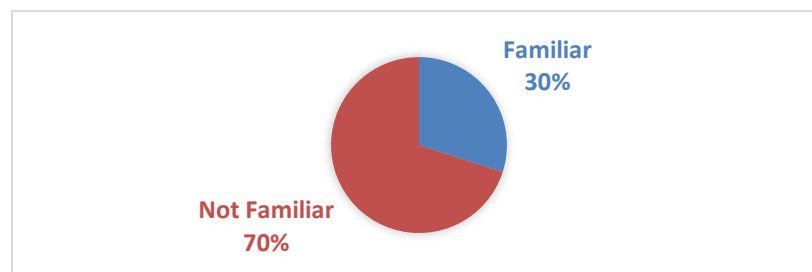


Figure 7. Familiarity with CPP Terms Pie Chart

Research question six asks: “Are you familiar with circular economy procurement practices, such as circular public procurement (CPP), green public procurement (GPP), socially responsible public procurement (SRPP), or others? If so, what is your understanding?”

Results display that participants are overwhelmingly unfamiliar with CPP practices and terms as 7/10 participants responded they are “not familiar”.

¹Operationalization: Turning abstract concepts into measurables, in this context, metrics, targets, definitions, and evaluation criteria.

RQ7: Familiarity with UBC Initiatives (ZWAP, CAP 2030)

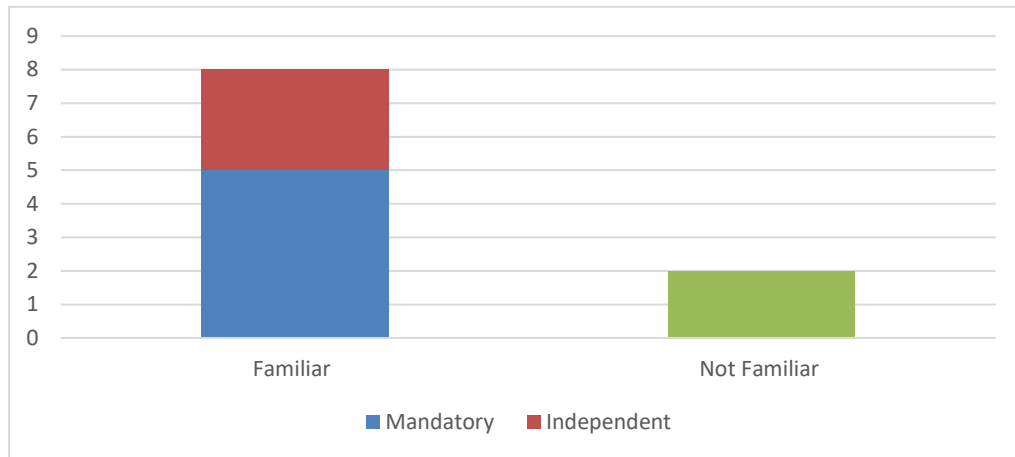


Figure 8. Familiarity with UBC CE Initiatives Bar Graph

Research question seven asks: “what is your familiarity with UBCs circular economy initiatives, such as the Zero Waste Action Plan (ZWAP) 2030: Towards a Circular Economy and the Climate Action Plan (CAP) 2030?”

7. 1 If familiar: “when and how was this initiative introduced to you?”

Majority of respondents demonstrated familiarity with UBC CE initiatives providing a ratio of 8:2 as two respondents stated unfamiliarity. When prompted further 5 respondents (5:8) of those familiar stated their familiarity derives from mandatory training or implementation of these initiatives while 3 (3:8) participants stated their familiarity comes from their independent knowledge of cited initiatives.

Q8: Is UBC Doing Enough to Incorporate EDI into Circular Purchasing?

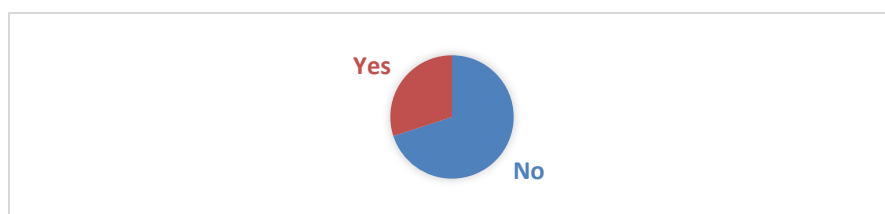


Figure 9. Is UBC doing enough with EDI in CPP Pie Chart

Research question eight asks: “is UBC Doing Enough to Incorporate EDI into Circular Purchasing?”

Participants overwhelmingly responded that UBC is not doing enough to incorporate EDI into circular purchasing with 7/10 participants responding no and 3/10 participants responding yes.

7.0 Discussion

The findings from the consultations highlight both the current engagement with EDI in CP and the key challenges preventing its full integration. While there is some engagement with EDI—primarily driven by mandatory requirements, the data indicates a need for clearer frameworks, better education, and strategic operationalization to ensure EDI is meaningfully embedded in procurement processes.

One of the primary challenges is the prioritization of budget (60%), timeline (50%), and requester needs (40%) over EDI considerations. These procurement priorities suggest that for EDI to be successfully integrated, it must align with existing operational constraints. Currently, EDI's role in evaluation criteria is minimal, with a weighting of only 1–5 points. This limits its impact on decision-making and reduces its perceived importance relative to other procurement factors. Increasing EDI's scoring weight and clearly defining its criteria could enhance its influence in procurement decisions.

A critical issue revealed in the consultations is the vagueness of EDI initiatives. Eighty percent of participants expressed frustration with the lack of concrete metrics and clear goals, making it difficult to measure success, as demonstrated by a participant:

“It really is not talking in generalities, but really saying, what does it mean? What are we trying to accomplish? I'm a numbers person, put some numbers to what percentage do we expect? How do we measure this? Does that link back to a board initiative of some sort, really kind of making tangible goals and then measuring those goals is, to me, how we're going to implement any of our missions. Sustainability is well ahead on that. You know, we have lead scorecards and life cycle, cost assessments and things that really put numbers to those goals, where we haven't really, we're not doing that with EDI”.

Compared to sustainability efforts, which benefit from defined scorecards and measurable objectives, EDI remains an abstract concept within procurement. Without tangible targets and accountability measures, it is unlikely to become an operational priority. This aligns with existing research on EDI in procurement, which highlights the difficulty of translating high-level aspirations into daily procurement practices (Hira & Au-Yeung, 2023; Fuertes, Vanacore & Hunka, 2022; Karaca et al., 2024).

Training and education gaps further compound the issue. While 60% of participants reported engaging with EDI, nearly half of them did so only because it was mandated, and 40% admitted they do not engage with EDI at all—often citing a lack of knowledge. This underscores the need for targeted educational initiatives to equip procurement officials with practical tools for applying EDI principles. A lack of standardized approaches also presents a challenge, with 50% of participants emphasizing the inefficiency of fragmented EDI efforts across different departments. Without a unified framework, individual procurement officers must navigate EDI considerations independently, increasing workload burdens and reducing overall effectiveness, as highlighted by a participant:

“I think it's keeping it simple, really, understanding what we're trying to accomplish and then having something to measure it. If not, let's get rid of it because we keep piling things on that aren't attributing to these goals, we paralyze ourselves. And UBC has a tendency to do that because we're so aspirational.”

To address these barriers, participants proposed several key solutions. The most common suggestion (70%) was the need for a clearer operational framework, with standardized metrics and measurable targets for EDI. Streamlining EDI into procurement evaluation tools—such as through enhanced scoring criteria—could make its implementation more practical and enforceable. Another proposed solution was the creation of a database of pre-approved EDI-compliant vendors. This would reduce the additional work procurement officers face when trying to identify vendors that align with EDI objectives.

Participants also called for enhanced training programs, with 20% emphasizing the need for specialized education to build competency in applying EDI principles. Additionally, 40% suggested that a consolidated, university-wide EDI approach would reduce inconsistencies and improve implementation. This is particularly relevant given the decentralized nature of UBC's procurement processes, which currently lack cohesion across faculties.

Beyond internal policy changes, the consultations revealed a broader vision for equitable procurement. While many participants associated equity with providing all vendors equal access to opportunities, some recognized the need for a more proactive approach—one that actively reduces systemic barriers rather than assuming a level playing field. The following participant demonstrates the importance of using public procurement as a tool:

“Using procurement as a tool to build healthy communities. And so, I translated that into our motto, kind of leveraging procurement to build healthy and inclusive communities.”

To achieve equitable procurement, efforts must extend beyond open access to create a system that actively reduces barriers and fosters meaningful inclusion for all. The last participants' response illustrates this potential; when intentional collaborative and empowering initiatives are created, public procurement has the power to foster healthy and equitable communities. To return to scholars Berry et al. (2021), “If the CE is to contribute to sustainable social transformations, justice must be more than a buzzword – the CE must be just by design” (pg. 1225).

Ultimately, these findings suggest that EDI must be embedded into procurement frameworks in a way that is both practical and enforceable. Rather than existing as an aspirational goal, it must be operationalized through clear metrics, enhanced evaluation criteria, and institutional support. Without such measures, there is a risk that EDI in procurement will remain a peripheral concern rather than a core priority. By aligning EDI initiatives with existing procurement priorities—such as budget and efficiency—UBC can create a procurement system that is both inclusive and effective, leveraging its purchasing power to foster social equity in meaningful ways.

8.0 Recommendations

For UBC to successfully achieve EDI in circular procurement steps must be taken to formulate and implement an EDI specific initiative designed with actionable objectives and adequate resources. The next step is for UBC to create a comprehensive action plan that combines both CE and EDI. I have developed an 8-step recommendation framework based on relevant literature and the participant interviews conducted for this project. Recommendations are divided in two parts: Action (short, mid to long-term) and recommendations for future research.

Recommendations for Action

1. Conceptualization

Define: UBC needs to define what CE means to them. There must be a citable meta-definition of CE that outlines EDI as a key facet of circular procurement, instead of as an addition or after thought. This definition must be easy to understand, written in clear and concise language, and contain actionable objects to refrain from vague references as problematized by CE research. Scholars Gyori et al., offer a comprehensive definition of socially equitable circular procurement that can be leveraged by UBC when conceptualizing their own definition:

“Circular Public Procurement is an approach to procurement that fosters environmental sustainability by contributing to closed energy and material loops within supply chains whilst minimising negative environmental impacts along the whole product life-cycle with the aim to promote social equity and justice in the society.” (2021, pg.1250)

Objectives: Provide an exact definition of social equity/EDI and sustainability as the objectives of CE. This way procurement operations staff will have a comprehensive reference of both CE and its environmental and social objectives.

This proposed definition does not segment GPP, IP, or SRPP from CPP, it instead weaves these frameworks together to create a consolidated mission. Which can lead to circular decisions and initiatives that further the equitable values of UBC and help operationalize EDI through actionable definition and objectives.

2. Values and Missions

UBC’s current growth values are incongruent with the values of traditional CE. Research demonstrates EDI in circular procurement arises from adopting a humanist, people-first initiative (Nogueira & Wallig, 2022; Wuyts & Marin, 2022; Martinez-Alier, 2021). To maximize effectiveness UBC should prioritize a degrowth and sustainable approach, when possible, ultimately aiming for human welfare rather than growth.

3. Targets and Reporting

Interview participants emphasized the need for clear, measurable targets to effectively implement EDI in circular economy (CE) initiatives. To address the current uncertainty around EDI efforts, a set of accessible targets should be developed to define expectations and objectives clearly. These targets would help operationalize EDI in CE, providing procurement staff with a clear understanding

of its meaning and offering progressive milestones to guide their efforts effectively. Examples for targets include:

- Aim to allocate a specific percentage (e.g., 15-25%) of procurement contracts to businesses owned by underrepresented groups, such as women, Indigenous peoples, BIPOC, or small and micro enterprises.
- Revise all Request for Proposal (RFP) templates within six months to include language prioritizing EDI and criteria rewarding inclusive practices.
- Ensure 100% of vendors have access to transparent criteria and procurement opportunities by standardizing communication channels and offering resources in multiple languages and platforms.

Participants additionally cited the need for an annual report to review effectiveness with EDI in CE objectives. I recommend developing a system or task force to track and report the social impacts of procurement contracts similar to the sustainability reports published by UBC annually.

4. Tools and Resources

To alleviate workloads, I recommend creating a series of tools and resources for procurement operations officials to draw from when sourcing vendors.

Preapproval Program: Create a vendor preapproval or EDI stamp/certifier program for vendors who have demonstrated their commitments and efforts to both sustainable and equitable procurement.

Equitable Vendor Database: Create a database of vendors who are “EDI certified” for procurement officers to leverage when pricing goods or services.

Enhanced Evaluation Criteria: Expand the EDI and Sustainability sections on the evaluation criteria to provide a more comprehensive and actionable definition. Score both EDI and Sustainability under the same criteria and raise the scoring (eg. 15-25 points).

5. Training and Human Resources

Training: Interviews indicate a deficit in both EDI and CE comprehension. Implement annual training for procurement operations officials on the research and frameworks behind circular and social procurement to provide a comprehensive understanding and allow for better implementation.

Human Resources: Additional resources are needed from UBC to create action plans, educate staff, implement targets, and track measurables for annual reporting. For the initiative to be effective this labour should not be offloaded to procurement operations staff unless there is adequate compensation and reorganization of their current workload. I recommend creating a collective approach with additional staff hired on or roles created to form a social and sustainable procurement task force.

6. Consolidation

Consolidate the UBC Bookstore’s procurement operations with the broader UBC procurement system, integrating all sectors into a unified framework. Within this consolidated structure, adopt

tailored approaches for specific industries to address their unique needs, while ensuring all sectors align with and contribute to the common EDI in CE goals.

7. Collaboration

Scholars Sebastain Carenzo, Paula Juarez, and Lucas Becerra's 2022 study on CE "from below" demonstrates the importance of inclusive collaboration and recognition when integrating EDI in CE. For UBC, I recommend a series of collaborative events to include all voices at the table and produce a CE framework that equally benefits our community.

Community Townhalls: Hosting inclusive townhalls where all members of the community, students, labour unions, UBC procurement officials, and UBC waste management and additional sectors come together to provide feedback and suggestions for UBCs CE initiatives.

Procurement Officials Round Table: The consultations demonstrate the importance and enthusiasm of feedback from the procurement operations officials themselves. I recommend consulting staff when developing this action plan regularly in order to gain feedback around the effectiveness or unintended challenges while also leveraging their experience and knowledge to formulate informed suggestions. This will become particularly important when tailoring procurement targets to specific UBC procurement industries (eg. construction vs food services) feedback sessions will highlight these differences and provide beneficial insights.

Community Partnerships: Partner with 1-5 community organizations, suppliers, or unions annually to provide mentorship and capacity-building programs for diverse suppliers to help them navigate the UBC procurement process and transition to a circular economy.

Community Supplier Workshop: Host workshops or consultations with diverse community suppliers to identify barriers and opportunities for their participation in procurement processes.

8. Pilot Projects

Scholars Bradley and Persson (2022) research on community do-it-yourself (DIY) government repair campaigns demonstrates that micro pilot projects aimed at extending product life effectively aid corporations in implementing CE. This research argues against largescale initiatives and instead illustrates the effectiveness of micro projects with feedback sessions and room to pivot. Leveraging this study, I recommend UBC starts implanting EDI in CE initiatives with microprojects and quarterly meetings to assess effectiveness and implement change if need.

Recommendations for Future Research

This project has opened up additional questions for future research on equitable circular public procurement. Future research is needed on partnerships and collaborations with public

procurement institutions and local vendors, suppliers, and community members to assess effectiveness of these initiatives. Additionally, research is needed on EDI in CE pilot projects as no studies currently exist examining pilot projects for CE from a social lens or from the Canadian context.

Conclusion

This study set out to explore how EDI can be integrated into UBC's procurement processes to support the transition to a circular economy. Primary and secondary research conducted demonstrates Circular Public Procurement has the potential to create both social and environmental sustainability when operationalized in an actionable and ideologically congruent way.

The significance of this project lies in its contribution to bridging the gap between high-level environmental and social goals and their practical application within procurement operations. By emphasizing clear definitions, measurable targets, and actionable tools, the report provides a roadmap for embedding equity in procurement processes. Notably, it underscores the importance of collaboration, tailored training, and resource allocation to ensure the success of such initiatives. However, the project faced limitations, including a small sample size and reliance on qualitative data, which may introduce biases or limit the generalizability of findings. Future studies should expand the scope to include diverse perspectives from vendors and community stakeholders, as well as pilot projects to test proposed recommendations.

In conclusion, integrating EDI into circular procurement is not only a pathway to sustainability but also an opportunity to drive social equity and inclusion. This report reaffirms the need for a cohesive framework and continued efforts to align procurement practices with UBC's broader environmental and social goals, fostering a more just and sustainable future.

References

- Alhola, K., Olof Ryding, S., Salmenperä, H., & Juul Busch, N. (2018). Exploiting the Potential of Public Procurement: Opportunities for Circular Economy. *Journal of Industrial Ecology*. <https://doi.org/10.1111/jiec.12770>
- Berry, B., Farber, B., Rios, F. C., Haedicke, M. A., Chakraborty, S., Lowden, S. S., Bilec, M & Isenhour, C. (2021). Just by design: exploring justice as a multidimensional concept in US circular economy discourse. *Local Environment*, 27(10–11), 1225–1241. <https://doi.org/10.1080/13549839.2021.1994535>
- Bradley, K., & Persson, O. (2022). Community repair in the circular economy – fixing more than stuff. *Local Environment*, 27(10–11), 1321–1337. <https://doi.org/10.1080/13549839.2022.2041580>
- Brundtland. (1987). Our Common Future: From One Earth to One World - A/42/427 Annex, Overview - UN Documents: Gathering a body of global agreements. Un-Documents.net. <http://www.un-documents.net/ocf-ov.htm>
- Bryman, A. (2004). Quantity and quality in social research. London: Routledge.
- Carenzo, S., Juarez, P., & Becerra, L. (2022). Is there room for a circular economy “from below”? Reflections on privatisation and commoning of circular waste loops in Argentina. *Local Environment*, 27(10–11), 1338–1354. <https://doi.org/10.1080/13549839.2022.2048258>
- Centre for Critical Qualitative Health Research, Facey, M., Gastaldo, D., Gladstone, B., & Gagnon, M. (2018). Learning and teaching qualitative research in Ontario: A resource guide. Toronto: eCampusOntario. Retrieved from <http://qualitativeresearchontario.openetext.utoronto.ca>
- Crenshaw, K. W. (1989). Demarginalizing the intersection of race and sex: A Black feminist critique of antidiscrimination doctrine, feminist theory, and antiracist politics. *University of Chicago Legal Forum*, 1989(1), 139–167.
- Fairbrother, P., & Banks, M. (2023). A Just Transition for Labour: The Challenges of Moves to a Circular Economy. *Relations industrielles / Industrial Relations*, 78(2), 1-20. <https://doi.org/10.7202/1109482ar>
- Fuertes Giné, L., Vanacore, E., & Hunka, A.D.(2022). Public Procurement for the Circular Economy: a Comparative Study of Sweden and Spain. *Circular Economy and Sustainability*, 2, 1021–1041. <https://doi.org/10.1007/s43615-022-00150-4>
- Gyori, G. (2022). The role of public procurement to foster social equity and justice: critical reflections on the circular procurement concept. *Local Environment*, 27(10–11), 1242–1253. <https://doi.org/10.1080/13549839.2021.2001798>

Hira, A., & Au-Yeung, R. (2023). Circular Economy Aspirations: Three Strategies in Search of a Direction. In Singh, P., Yadav, A., Chowdhury, I., & Singh, R (Eds.), *Green Circular Economy: A New Paradigm for Sustainable Development* (pp. 1-22). Springer International Publishing.

Karaca, F., Tleuken, A., Pineda-Martos, R., Ros Cardoso, S., Orel, D., Askar, R., Agibayeva, A., Güemez, E.G., Salles, A., Varol, H.A., & Braganca, L. (2024). Cultivating Sustainable Construction: Stakeholder Insights Driving Circular Economy Innovation for Inclusive Resource Equity. *Buildings*, 935(14) 1-22. <https://doi.org/10.3390/buildings14040935>

McCrudden, C. (2004) Using public procurement to achieve social outcomes. *Natural Resources Forum*, 28, 257-267. <https://doi.org/10.1111/j.1477-8947.2004.00099.x>

McLennan, A., & Krebs Schleemann, B. (2021). The power of public procurement in the transition to a circular economy. *Field Actions Science Reports*, 23, 44-49. URL: <https://journals.openedition.org/factsreports/6614>

Martin-Ortega, O., & Methven O'Brien, C. (2018). Advancing Respect for Labour Rights Globally Through Public Procurement. *Politics and Governance*, 5(4), 69–79. DOI: 10.17645/pag.v5i4.1073

Martinez-Alier, J. (2021). Circularity, entropy, ecological conflicts and LFFU. *Local Environment*, 27(10–11), 1182–1207. <https://doi.org/10.1080/13549839.2021.1983795>

Mazzocchi, F. (2020). A deeper meaning of sustainability: Insights from indigenous knowledge. *The Anthropocene Review*, 7(1), 77-93.

McCrudden, C. (2004). Using public procurement to achieve social outcomes. *Natural Resources Forum*, 28, 257-267. <https://doi.org/10.1111/j.1477-8947.2004.00099.x>

Nogueira, A., & Wallig, J. F. (2022). The post-industrial legacy in Brazil: where circular economy principles meet collective urban practices by design. *Local Environment*, 27(10–11), 1372–1393. <https://doi.org/10.1080/13549839.2022.2048259>

Nikolaou, I.E., Tsalis, T.A., & I. Vatalis, K. (2022). Chapter 15 - A framework to integrate circular economy principles into public procurement. *Circular Economy and Sustainability*, 279-291. <https://doi.org/10.1016/B978-0-12-819817-9.00020-X>.

Olshansky, E. F. (2014). Overview of grounded theory. *Nursing research using grounded theory: Qualitative designs and methods in nursing*, 1-8.

Padilla-Rivera, A., Russo-Garrido, A., & Merveille, N. (2020). Addressing the Social Aspects of a Circular Economy: A Systematic Literature Review, *Sustainability* 12(19), 1-17. <https://doi.org/10.3390/su12197912>

- Recio, E & Hestad, D. (2022). Still one Earth: Indigenous peoples. *International Institute for Sustainable Development*. <https://www.iisd.org/system/files/2022-04/still-one-earth-Indigenous-Peoples.pdf>
- Rathi, D., Vörösmarty, G., & Tátrai, T. (2023). Gender issues in procurement: A review of current themes and future research directions. *Vezetéstudomány Budapest Management Review*, 54(11), 40–51. <https://doi.org/10.14267/VEZTUD.2023.11.04>
- Rosenbaum, R. A., & Kenhdy, J. F. (2022). Cultivating circular economies in the gaps of governance: lessons from Lebanon's ecosystem of CE micro projects. *Local Environment*, 27(10–11), 1304–1320. <https://doi.org/10.1080/13549839.2022.2040466>
- Silva, M., Ruel, S., & Sousa-Filho, J.M. (2024). Measuring supplier diversity, equity and inclusion (DEI): scale development and empirical validation. *Supply Chain Management: An International Journal*, 29(2), 279–296. DOI 10.1108/SCM-06-2023-0306
- Sordi, A., Tate, W.L., & Huang, F. (2022). Going beyond supplier diversity to economic Inclusion: Where are we now and where do we go from here? *Journal of Purchasing and Supply Management*, 28(2), 1-7. <https://doi.org/10.1016/j.pursup.2022.100751>
- Sovacool, B. K., Iskandarova, M., & Hall, J. (2023). Industrializing theories: A thematic analysis of conceptual frameworks and typologies for industrial sociotechnical change in a low-carbon future. *Energy Research & Social Science*, 97, 102954. <https://doi.org/10.1016/j.erss.2023.102954>
- Thomas, L. (2022). *The intersectional environmentalist: How to dismantle systems of oppression to protect people + planet* (First ed.). Voracious, Little, Brown and Company.
- United Nations. (2024). The 17 Sustainable Development Goals. *United Nations*. <https://sdgs.un.org/goals>
- UBC. (2024). Neighbourhood Climate Action Plan. Retrieved from https://planning.ubc.ca/sites/default/files/2024-06/Neighbourhood%20Climate%20Action%20Plan_FINALforweb.pdf
- UBC. (2024). *Equity and inclusion glossary of terms*. Equity and Inclusion Office. <https://equity.ubc.ca/resources/equity-inclusion-glossary-of-terms/>
- UBC Finance. (2023, January). Sustainable Purchasing Guide | UBC Finance. *Finance.ubc.ca*. <https://nance.ubc.ca/procure-pay/sustainable-purchasing-guide>
- UBC. (2023). *Zero Waste Action Plan 2030*. Retrieved from https://planning.ubc.ca/sites/default/files/2023-08/230608_ZWAP.pdf
- UBC. (2021). *Support On-Campus Sustainability with reuse-it!* Resue-it UBC. <https://reuseit.ubc.ca/>

UBC. (2021) Climate Action Plan 2030. Retrieved from https://planning.ubc.ca/sites/default/files/2021-12/UBCV_CAP2030_FINAL.pdf

UBC. (2020). *Inclusion Action Plan (IAP)*. Retrieved from <https://equity3.sites.olt.ubc.ca/files/2020/01/UBC-IAP-Web-Jan2020.pdf>

UBC. (2020). Indigenous Strategic Plan. Retrieved from https://aboriginal-2018.sites.olt.ubc.ca/files/2021/06/UBC.ISP_StrategicPlan2020-SPREAD-Borderless-REDUCED.pdf

UBC Sustainability. (2019, January 13). Purchasing. *Sustain.ubc.ca*. <https://sustain.ubc.ca/campus/purchasing>

UBC. (2018) Green Building Action Plan. Retrieved from https://planning.ubc.ca/sites/default/files/2019-11/PLAN_UBC_Green_Building_Action_Plan_Full.pdf

UBC. (n.d.). *UBC Furniture Reuse Program*. UBC Facilities. <https://facilities.ubc.ca/projects/ubc-furniture-reuse-program/>

Wuyts, W., & Marin, J. (2022). “Nobody” matters in circular landscapes. *Local Environment*, 27(10–11), 1254–1271. <https://doi.org/10.1080/13549839.2022.2040465>

Appendix

Appendix A

UBC Climate Action Plans

UBC Action Plan	Description	Relevance to EDI or CP
Climate Action Plan 2030 (CAP 2030)	Key climate targets are mentioned including a goal of net-zero operational emissions by 2035.	Sustainable procurement is directly mentioned under "Food Systems" and "Waste and Materials" headings.
Zero Waste Action Plan (ZWAP)	This plan most directly relates to sustainable procurement initiatives.	There is a direct call to implement a sustainable procurement plan.
Indigenous Strategic Plan	The Indigenous Strategic Plan sets out a series of eight goals and 43 actions the university will collectively take in order to advance our vision of becoming a leading university globally in the implementation of Indigenous peoples' human rights.	Action 23: "Implement an Indigenous procurement strategy which prioritizes the provision of goods and services from Indigenous businesses and vendors." (pg. 30).
Green Building Action Plan	This report discusses environmental compliance and the impact of construction material and waste.	Relevant for sustainable construction, which has procurement and material implications, there could be opportunities for UBC procurement staff to implement the Green Building Action Plan.
Neighborhood Climate Action Plan	This report discusses construction and transportation emissions, climate resilience and local ecology.	Little relevance.
Integrated Stormwater Management Plan	This report discusses the plan to manage stormwater on campus in response to future climate change.	Little relevance.
Water Action Plan	This report discusses reducing and managing UBC's water consumption.	Little relevance.

Appendix B

People-first CE initiatives in Lebanon from Rosenbaum and Kehdy 2022

Example	Description	Key Features	Page Numbers
Regenerate Lebanon (CE Village)	A circular economy village built during Lebanon's 2019–2020 Thawra protests	<ul style="list-style-type: none"> - Zero-waste kitchen serving 500–1000 people daily. - Water refill stations & solar power for sustainability. - Waste sorting & composting for environmental impact. - Space for discussions on justice & systemic change. 	1312–1316
Micro CE Projects (Post-2015 Garbage Crisis)	Community-driven initiatives that emerged to address Lebanon's waste crisis.	<ul style="list-style-type: none"> - Recycling companies reducing landfill waste. - Composting initiatives tackling organic waste. - Upcycling projects repurposing discarded materials. - Plastic-free refill stations reducing waste. 	1307–1309
Mouneh Food Preservation	Revival of ancestral food preservation techniques to reduce waste and support local farmers	<ul style="list-style-type: none"> - Mouneh preserves food to prevent waste. - Promotes local, self-sufficient food systems. - Challenges capitalist consumption patterns. 	1310–1311
Post-Beirut Blast (2020) Recovery Efforts	Circular recovery efforts following the Beirut explosion	<ul style="list-style-type: none"> - Recycling shattered glass for reconstruction. - Mutual aid collectives supporting vulnerable groups. - Focus on resource redistribution and local rebuilding 	1316–1317

Appendix C

Prospective participants were contacted by the researcher by email for a 30-minute virtual consultation regarding EDI in CE at UBC. Initial contact from the student researcher was made in the first week of September 2024 with the following email template sent to twelve procurement operations staff:

Subject: SEEDs EDI in Circular Procurement Interview Scheduling

Dear [Interviewee's Name],

I hope you're doing well. Earlier in the summer, you were contacted to participate in the SEEDs research project on Equity, Diversity, and Inclusion in Circular Procurement, and I'm reaching out to move forward with scheduling our interview.

At your convenience, kindly let me know your availability (date and times) for a 30-minute interview from September 23rd - October 7th. I'm flexible and can accommodate your schedule. The interviews will be remote over Zoom, but if you have any preferences regarding the format (phone or other preferred platforms), please feel free to mention that as well.

Thank you again for your time and willingness to contribute to this project. I look forward to our conversation and appreciate your valuable insights.

Best regards,

The student researcher received ten responses and conducted ten consultations between September 23rd and October 25th, 2024. From initial contact the following study characteristics were formalized:

- Sample Size 10 (N=10)
- Response rate (RR) 10 out of 12 participants contacted (RR= 83.33%)

The consultations consisted of eight semi-structured questions, meaning they were pre-determined open-ended questions with the flexibility to explore and further question topics or responses as they come up in the interview. The questions were designed to identify gaps and opportunities in EDI in CPP which could be used to support the Manager's work to update the University's procurement processes. Each participant was asked the following questions:

Introductory Questions

1. Describe your role in UBC's end to end procurement process?

2. In your role, what are your top priorities when procuring goods or services?

EDI Questions

- 3.** In your role, do you ever consider Equity, Diversity, and Inclusion when procuring goods or services?
 - 3.1** If yes, what are these considerations (and what is their impact)? Please provide an example.
 - 3.2** Are they mandatory requirements or guidelines or independently considered?
 - 3.3** If not, what can UBC do to make EDI considerations more accessible and applicable in your role?
- 4.** (Skip if answered 3.3) In your opinion, what can UBC do to make it easier for procurement operations staff to factor EDI considerations in their purchasing?
- 5.** In an ideal world, what does equitable public procurement look like to you?

EDI and CE Questions

- 6.** Are you familiar with circular economy procurement practices, such as circular public procurement (CPP), green public procurement (GPP), socially responsible public procurement (SRPP), or others? If so, what is your understanding?
- 7.** What is your familiarity with UBCs circular economy initiatives, such as the Zero Waste Action Plan (ZWAP) 2030: Towards a Circular Economy and the Climate Action Plan (CAP) 2030?
 - 7.1** If familiar: when and how was this initiative introduced to you?
Follow up: In your role do you implement or consider these initiatives in any of your work? If so, which?
 - 7.2** Do you find these initiatives have any EDI considerations? If so, which?
Follow up: if not, in your opinion what EDI considerations could they use?
If not familiar: In your opinion is there anything UBC could do to make this initiative more widely adopted?
- 8.** In your opinion, does UBC sufficiently factor EDI considerations into circular or sustainable purchasing?
 - 8.1** If not, what can UBC do to make EDI considerations an everyday part of your buying?