

British Columbia

Industrial, Commercial and Institutional Sector

Waste Flows Study Snapshot

About this study

The Canada Plastics Pact (CPP) is working to create a circular economy for plastics packaging, in line with its **Roadmap to 2025**. The CPP recognizes that a first step towards achieving a circular economy for plastics packaging and improving its management is to gather better data and information on the current state of plastics packaging and material flows in Canada, including within the industrial, commercial, and institutional (ICI) sector.

With this in mind, the CPP worked with the Government of British Columbia (a CPP Implementation Partner) to commission a packaging waste flows and recycling study for the BC ICI sector. The purpose of the project was to develop a data-driven baseline for the amount of packaging and paper products (PPP) – including plastic packaging – that is generated and subsequently either reused, recycled, or disposed by BC's ICI sector.

Research for the BC ICI Waste Flows Study was carried out by Policy Integrity Inc., with support from JTL Squared Consulting, Lichens Recyclability, and Westerview Consulting, and completed in July 2022. In total, 350 audits were assessed, including 61% from BC data sources.

The full, technical report can be [downloaded here](#).



The following ICI sub-sectors were included in the scope of this work:

- Agriculture
- Construction
- Manufacturing
- Trade
- Administration and Office
- Transportation and Warehousing
- Educational Services
- Health Care and Social Assistance
- Arts, Entertainment, and Recreation
- Accommodation and Food Services



Key findings

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- The percentage of overall PPP disposed from the ICI sector in BC is estimated to range from 225,000-326,000 tonnes per year, equal to approximately 26% of all ICI waste disposed in the province.
- Total ICI waste disposed in BC's ICI sub-sectors is approximately 1,119,060 tonnes per year.
- British Columbia represents approximately 14% of all ICI sectors across Canada.
- The main contributors to the PPP items disposed of from the ICI sector come from the Trade (i.e., wholesale and retail) and Food Services sub-sectors at 40% and 32%, respectively. Transportation and Warehousing (14%) and Manufacturing (9%) were the next highest sub-sectors in terms of disposal rates for PPP materials, as seen in **Figure 1**.
- Plastic packaging is the largest category of materials (tied with paper) disposed of within the PPP stream, equal to approximately 12% – or over 100,000 tonnes per year (**Table 1**).
- Plastic packaging materials were the second most common PPP material collected for recycling after paper fibre, at an average of 8% of the PPP stream and a range of 5-18% depending on the ICI sub-sector.
- In general, the results of this study show that composition, quantities, and management of ICI PPP is much more variable than residential PPP. ICI PPP composition and quantity varies significantly by its source (i.e., individual generator and ICI sub-sector) depending on a variety of factors.
- There is a need to consider a yield loss during processing, which is mainly due to contamination.
- Material tends to only be collected when there is an economic value added (i.e., developed market and a cost-effective sortation process).
- Access to detailed and coherent datasets for ICI PPP generation and management in BC, as in the rest of Canada, is limited, and the PPP profile within the ICI sector (i.e., across ICI sub-sectors) and across jurisdictions (i.e., between provinces and across zones of a province) is heterogenous.
- Interviews completed for the study suggest there is a significant amount of reuse activities and strategies being applied within the ICI sector, including for totes, pallets, crates, trays, and pressurized containers that account for hundreds of thousands of rotations per year.

Figure 1: Distribution of ICI PPP disposed, by sub-sector

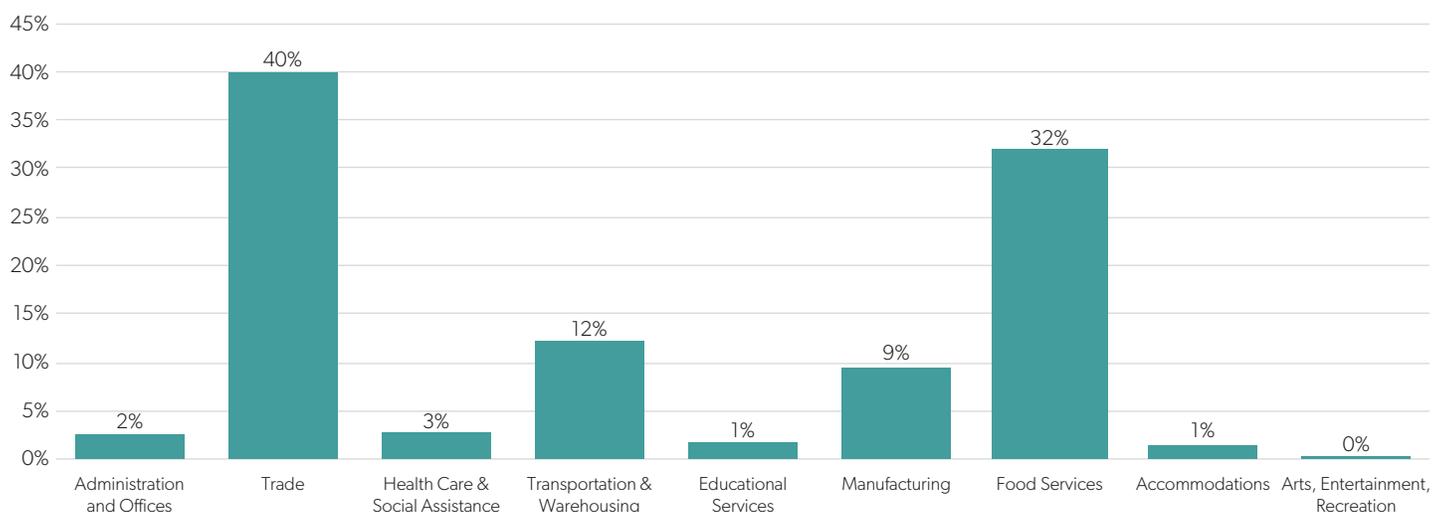


Table 1: Comparison of ICI PPP disposed in BC

	Regional Districts waste audits	Industry waste audits	Statistics Canada WMIS (2018)
Total ICI waste disposed* (tonnes)	932,000	1,191,000	1,727,000
Total ICI PPP disposed*	225,000	326,000	n/a
Proportion of PPP in ICI disposal stream	26%	26%	n/a
PPP Fibre	12%	12%	n/a
PPP Plastic	12%	12%	n/a
PPP Metal	2%	1%	n/a
PPP Glass	1%	1%	n/a
Distribution of ICI PPP disposed by zone			
Vancouver Island & Coastal	19%	14%	n/a
Lower Mainland	50%	66%	n/a
Southern Interior	15%	12%	n/a
Kootenay	4%	2%	n/a
North Central	12%	6%	n/a

Next steps

The CPP and its Partners are exploring how best to use the insights gained through this study to inform next steps. Findings from this study might be transferable to other provinces in Canada. The potential also exists to replicate this study at the national level, which in turn would help to inform important strategies moving forward and guide actions and initiatives within CPP’s Roadmap to 2025.

Efforts will be made to prioritize the key issues and address the structural barriers while advancing the relevant opportunities, supporting the accelerated transition to a circular economy for plastics packaging in Canada.

For more information, please contact the Canada Plastics Pact at info@plasticspact.ca

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Report researched and written by:



Funding partner:



The Canada Plastics Pact (CPP) is creating a circular economy in Canada in which plastic waste is kept in the economy and out of the environment. It is a unique multi-stakeholder, industry-led, cross-value chain collaboration platform which aims to tackle plastic packaging waste and pollution by bringing together businesses, government, non-governmental organizations and other key actors in the local plastics value chain. Canada Plastics Pact Partners are united, working together on achieving clear, actionable targets by the year 2025.



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