

Report Background

Monitoring waste metrics is essential for evaluating waste management strategies. Annually, the County of Peterborough produces the waste management report to distribute to Townships. This report is based on data submitted by Township and City staff, along with contractors who report diverted material tonnage. Data includes measured and estimated weights, reported in metric tonnes. With the transition to Producer Responsibility model effective January 1, 2024 (O.Reg. 392/21), Municipalities no longer submit diversion data through Resource Productivity and Recovery Authority (RPRA). As a result, the County is reviewing which metrics best support performance tracking and data-driven decision-making.

Key Metrics

Diversion rate: Percentage of waste diverted from landfill for recycling or reuse. $Diversion\ rate = (Total\ Diverted\ Waste/Total\ Waste\ Generated) \times 100$ Target: 60% diversion, Waste Management Master Plan, 2025.

Per Capita Waste Generation: Average amount of waste (kilograms) generated per Resident.

 $Per\ Capita\ Waste\ Generation\ =\ Total\ Waste\ Generated/Population$

Light as a feather, big as a truck — Interpreting Waste Diversion rates.

Waste diversion rates are measured by weight, but materials vary in density, so equal volumes don't always mean equal weight. Therefore, trends in packaging — such as lightweighting (shift from heavy to light) — complicate the interpretation of diversion trends over time, especially for Blue Box materials, as even more items are recycled, the total weight might not directly represent a volume increase.



Report Summary

Peterborough County's Diversion rate was 53% in 2024, down slightly from 54% in 2023, and below the 60% target set in the Waste Management Master Plan. Township diversion rates varied from 44% to 60% with mixed year-over-year changes. Residential garbage totaled 11,136 metric tonnes, a 3% increase from 2023. This represented 47% of all residential waste generated and accounted for 25% of total landfilled material received at the Peterborough County City Waste Management Facility (PCCWMF). Monthly disposal averaged 916 ± 144 tonnes, with 64% from curbside collection. Disposal peaked in summer, reflecting seasonal resident activity. On Average, households generated 897 kg of waste (418 kg landfilled, 479 kg diverted), while per capita generation was 374 kg (174 kg landfilled, 199 kg diverted). Household and per capita disposal rates varied by township. County-wide diversion included Blue Box (22% of total generated), Organics (10%), Leaf and Yard waste (8%), HHW (1%), WEEE (1%), and other Township-led initiatives (13%). Waste audits suggest that expanding the organics collection program could reduce landfilled residential garbage by up to 51%, diverting 5,846 tonnes annually, and extending landfill life by 1.5 years.

2024 Diversion Rate, Peterborough County

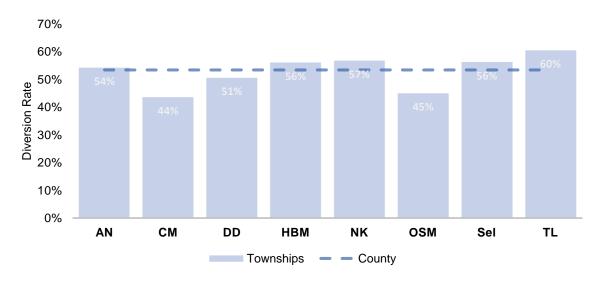


Figure 1: County and Township Diversion Rates 2024. The County diversion rate is 53% with Township diversion rates ranging from 44% to 60%.



In 2024, Peterborough County recorded an overall waste diversion rate of 53%, a slight decrease from 54% in 2023. While this represents a minor step back from the 60% target outlined in the Waste Management Master Plan, it highlights ongoing opportunities for improvement. While several Townships saw a slight increase in diversion (range 0 to 3%), decreased diversion was seen among others (range -1 to -5%).

In 2024, landfilled garbage represented 47% of total residential waste in Peterborough County. A total of 11,136 metric tonnes of County residential garbage were disposed at the PCCWMF, representing a 3% increase from 2023. County residential garbage contributes 25% of annual waste disposed of at the PCCWMF.

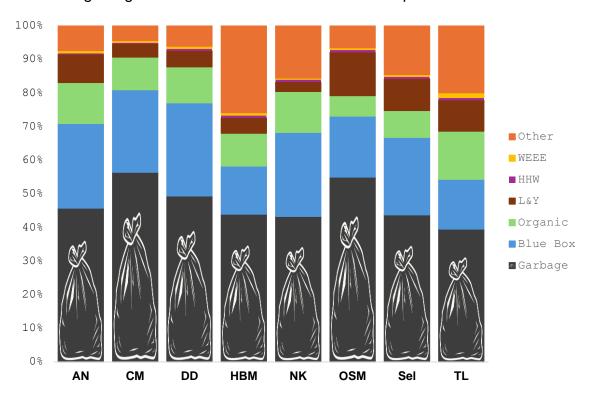


Figure 2. Composition of total residential waste generation by Township, 2024. Categories include landfilled garbage, blue box, organic material, leaf and yard waste (L&Y), household hazardous waste (HHW), waste electronic and electrical equipment (WEEE), and other diverted materials. Garbage totals include curbside collection, depot drop-off, and residential drop-off at PCCWMF. Blue Box, organics, and L&Y include curbside and depot collections; organics also includes backyard and countertop composting estimates based on cumulative units sold. HHW and WEEE include depot only collections. Other diverted material represents additional



Township-led diversion initiatives such as scrap metal, construction and demolition (C&D), tires, mattresses, textiles, deposit return, reuse centers, and other programs reported to County staff.

Diverted materials, encompassing all waste categories not sent to landfill, include programs led by Producer Responsibility Organizations (PROs), Peterborough County, and Townships. These collectively determine the diversion rate calculated for Peterborough County. Blue box material, which makes up 22% of all waste generated, currently includes collection from non-eligible sources. Organics collection remains limited in the County. The diverted organics included in this report include backyard composting estimates (88% of reported County values) based on cumulative annual composter sales in addition to actual curbside and depot organics (12% of reported County values). Together, these sources of organics account for 10% of waste generated.

Unlocking Organics for Diversion and Landfill Capacity Gains.



Waste audit results (Cambium, 2025) reveal that a substantial portion of what ends up in the garbage is organic material that could be diverted. Expanding the County's organic waste collection program could reduce landfilled garbage by **up to 51%**. Currently, an estimated 5,846 metric tonnes of organic waste are

landfilled each year through County residential garbage, representing 13% of all material received at the PCCWMF. By diverting this organic waste, the County could raise the diversion rate to 77%, exceeding current targets. If fully implemented and widely adopted, it could also extend the landfill's operational life by an estimated **1.5 years** (15% of remaining capacity). Additional benefits include a reduction in locally landfilled waste at the Smith landfill in Selwyn Township.

Monthly Garbage Disposal, Peterborough County 2024

In 2024, Townships collectively landfilled an average of 916 \pm 144 metric tonnes of garbage per month (figure 3). With the majority (64%) collected at the curbside. An



additional 541 metric tonnes were disposed of through residential drop-off to PCCWMF. Variability in monthly garbage disposal weights reflect seasonal changes in resident behaviour, including increased demand from seasonal residents and visitors during the summer months.

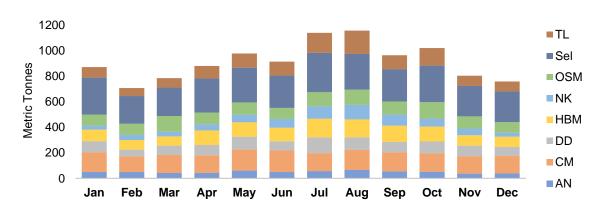


Figure 3. Monthly garbage to landfill in Peterborough County. Total garbage including curbside, depot, and local landfill (Sel only) in metric tonnes by Township are represented.

Waste Generation Per Household, Peterborough County 2024

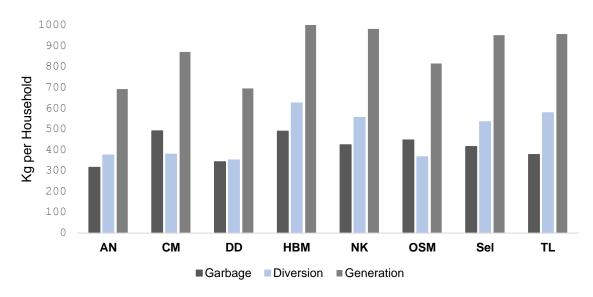


Figure 4. Annual waste generation, landfilled garbage, and material diversion per household in 2024. To allow for comparisons between Townships, the reported rate is adjusted for equivalent permanent households, based on an assumed occupancy rate of 17% among seasonal residents (CSR, 2003). Household counts retrieved in November 2024 (MPAC, 2024).



In 2024, Peterborough County experienced 1% growth in permanent households from 2023. The County waste generation rate was 897 kg per Household in 2024 comprised of 418 kg per household landfilled garbage, and 479 kg per household of measured diverted materials. At the household level, garbage disposal rates range from 344 to 491 kg per household in 2024. Diverted material ranged from 368 to 626 kg per household per year.

Waste Generation Per Capita, Peterborough County 2024

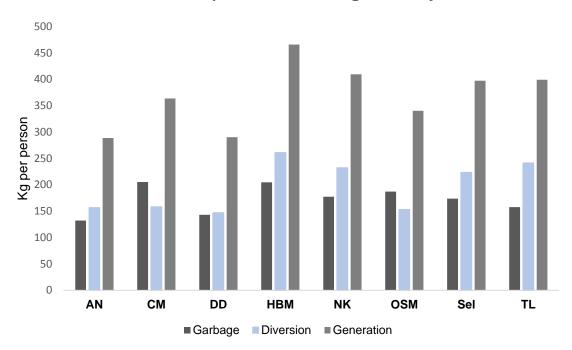


Figure 5. Annual waste generation, landfilled garbage, and material diversion per capita in 2024. To allow for comparisons between Townships, the reported rate is adjusted for equivalent permanent households, based on an assumed occupancy rate of 17% among seasonal residents (CSR, 2003).

Peterborough County's waste generation rate was 374 kg per person in 2024, comprised of 174 kg per person landfilled garbage, and 199 kg per person of measured diverted materials. Among Townships, per capita garbage disposal rates range from 132 to 205 kg per person, while diverted material range from 147 to 261 kg per person per year.



Douro-Dummer, 2024

Douro-Dummer (DD) saw slight growth of 1% in permanent households in 2024, however diversion increased to 51% (table 1), and per capita garbage sent to landfill decreased slightly (-0.4 %) year over year.

Table 1. County and Douro-Dummer generation trend, 2024. Equivalent residential households and per capita rates generated from MPAC data and census averages from Statistics Canada.

| | | Garbage | | Diversion |
|--------|-------|------------------|---------------|-----------|
| | | kg per household | kg per capita | % |
| DD | 2023 | 345 | 144 | 49 |
| | 2024 | 344 | 143 | 51 |
| | Trend | ↓ -0.4% | ↓ -0.4% | ↑ 2% |
| County | 2023 | 397 | 166 | 54 |
| | 2024 | 418 | 174 | 53 |
| | Trend | ↑ 5% | ↑ 5% | ↓ -1% |

Beyond changes in waste collection and diversion program delivery, annual fluctuations in waste composition are expected, due to evolving resident disposal behaviours, household circumstances, and broader economic trends.

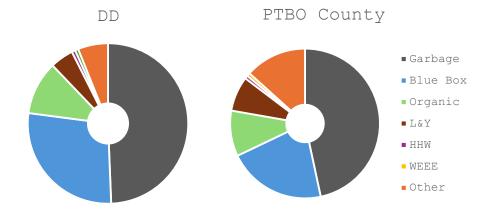


Figure 6: Composition of waste (by weight) generated in Douro-Dummer compared with Peterborough County in 2024.



2024 waste composition in Douro-Dummer (figure 6), generally reflected the overall waste composition for Peterborough County, with above County-average contributions from Blue Box (28%), and organics (11%). These figures reflect strong resident engagement in local diversion programs, including depot organics drop-off (Moloks) use and the Garbage to Garden backyard composting program.

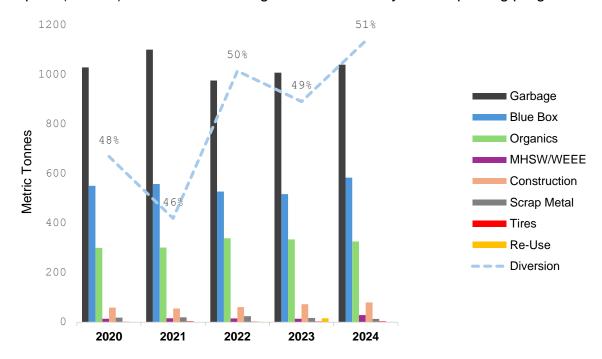


Figure 7. Five-year waste composition in **Douro-Dummer**. Dashed line indicates trend in calculated diversion rates from year to year. Organics includes all compostable material including leaf and yard waste.

While year to year fluctuations are anticipated (figure 7), current trends suggest increasing community participation and continued progress toward higher diversion outcomes. Given this momentum, maintaining engagement and exploring additional diversion opportunities could build on existing success.

HHW and WEEE diversion in Peterborough County, 2024

The collection of household hazardous waste (HHW) and waste electronic and electrical equipment (WEEE) plays an important role in diversion, and the protection the environment and human health by ensuring these materials are



managed responsibly. The diversion of these materials also helps to recover valuable non-renewable resources.

In 2024, a combined total of approximately 165 metric tonnes of HHW and 173 metric tonnes of WEEE was collected and diverted from landfill in Peterborough County. The material collected was managed by various PROs with the material processed for recycling, reuse, and stabilization, with contaminated materials likely landfilled or incinerated.

HHW Diversion in Douro-Dummer, 2024

Seasonal HHW events at Halls Glen transfer station had low resident turn out in 2024, with 84 cars counted across the events held on May 25th and August 17th. However, Douro Dummer residents accounted for 13% of County HHW users at the County/City recycling facility at 400 Pido Rd.

WEEE Diversion in Douro-Dummer, 2024

Through depot WEEE collection in 2024, Douro Dummer collected 9.7 metric tonnes of material. Of this, 71% of collected material was program material, and generated revenue. Within all material collected, contamination by hazardous materials (most commonly appliances containing freon) resulted in a 19% revenue loss (loss of \$263), which would have otherwise been transferred to the township. Further efforts to reduce contamination in the collected WEEE material by Staff could reduce this revenue loss.

Common items that result in revenue loss from in WEEE include:

- Appliances containing freon (A/C units, watercoolers etc.)
- Compressed gas cylinders (HHW)
- Fluorescent and halogen bulbs (HHW)
- Items containing mercury such as old thermostats (HHW)
- Other HHW materials



Sources

City of Peterborough scale reports (Landfill and Material Recycling Facility)

Township Staff – estimates and/or scale records

Household Data – Municipal Property Assessment Corporation (MPAC) and County Planning Department

- Statistics Canada. 2023. (table). *Census Profile*. 2021 Census of Population.

 Statistics Canada Catalogue no. 98-316-X2021001. Ottawa. Released November 15, 2023. https://www12.statcan.gc.ca/census-recensement/2021/dp-pd/prof/index.cfm?Lang=E (accessed May 30, 2025)
- CSR (2003). Residential GAP Manual on Generally Accepted Principles

 (GAP) for Calculating Municipal Solid Waste System Flow: Development
 of a Methodology for Measurement of Residential Waste Diversion in

 Canada. https://rpra.ca/wp-content/uploads/Complete-GAP-Manual.pdf
 Cambium (2025). Waste Management Master Plan Update. County of

Cambium (2025). Waste Management Master Plan Update, County of Peterborough. May 12, 2025.

For more information about this report, contact:

Harriet Walker, Waste Management Administrative Coordinator Peterborough County hwalker@ptbocounty.ca