

Background

Each year, the Resource Productivity and Recovery Authority (RPRRA) receives reports from municipalities, recycling associations and First Nations (“municipal programs”) on the amounts of materials diverted under each of their residential waste diversion programs—the Municipal Datacall. This includes submitting tonnage and financial information for residential Blue Box material collected from local residents. In addition, RPRRA requests the submission of tonnage data for all other non-Blue Box materials the municipal program operates, including hazardous or special waste, waste electrical and electronic equipment, organics, garbage, and other materials.

This report is the fifth in a series of five reports based on data collected in the 2016 Datacall. It covers information reported in the Datacall used to calculate residential waste diversion rates for each reporting municipal program, municipal group, and the province overall. The practice used to calculate the residential waste diversion rate is “GAP” (Generally Accepted Principles)¹. Diversion tonnage is included for the following activities:

- Municipally-operated recycling activities:
 - Blue Box printed paper and packaging;
 - Waste Electrical and Electronic Equipment (WEEE);
 - Municipal Hazardous or Special Waste (MHSW);
 - Other recyclables (e.g., scrap metal); and
 - Used tires².
- Municipal organic processing activities (e.g., kitchen organics);
- A per capita³ allowance for provincial deposit systems based on beer, wine and spirits containers returned from the residential sector;
- An allowance for residential on-property management (e.g., backyard composting and grasscycling); and
- Municipally-operated reuse activities.

As part of the 2016 Datacall RPRRA introduced the Short Form Datacall (SFD) available to all municipal programs with a population under 30,000. Municipalities that reported under the SFD were only required to submit Blue Box data, and therefore will not be included in this report. All tables and graphs have been updated to only include the 105 municipal programs that reported under the Long Form Datacall in 2016, with previous year totals excluding SFD programs.

Disposal tonnes referenced in the spreadsheets include garbage and processing residuals from recycling and composting operations disposed at landfill or Energy-from-Waste facilities. The following formulas are used to calculate the residential waste diversion rates:

¹ Generally Accepted Principles (GAP) for Calculating Municipal Solid Waste System Flow, Development of a Methodology for Measurement of Residential Waste Diversion in Canada, CSR (Corporations Supporting Recycling), November 2003.

² Diversion of passenger and light truck tires is estimated by a credit of 7.1 kg/capita.

³ A credit of 5.51 kg/capita is included for the return of residential beer, wine and spirits containers.

$$\text{Diversion Rate} = \frac{\text{Diversion Tonnes}}{\text{Generation Tonnes}} \times 100\%$$

$$\text{Generation Tonnes} = \text{Diversion Tonnes} + \text{Disposed Tonnes}$$

The data used to generate this analysis can be found in the *2016 Residential Waste Diversion Rate* spreadsheet available on the RPRA website.

Municipal Datacall Reporting

Of the 241 programs that submitted data in the 2016 Datacall, 105 completed the Long Form Datacall and are included in the Ontario Diversion Rate calculations. These municipal programs reported a total population of 12,994,892 and total household count of 5,146,914 which represents 96.1% and 95.0% of the provincial total respectively.

Verification of Data Reported

There are several check points to ensure that the data reported into the Datacall by municipal programs is accurate. After the Datacall reporting period ends, RPRA attempts to verify the data provided by each program in its Datacall submission form through a data verification process. Although staff assess each section of the Datacall, the municipal program remains responsible for the correctness of data submitted. The verification process can include the confirmation of any data variances from the previous year and an assessment of costs and tonnages reported.

To ensure that residential waste diversion rates are calculated accurately and fairly amongst municipalities, RPRA adjusts material quantities reported by some municipal programs under certain circumstances. For example, RPRA makes adjustments where disposal tonnages are missing or where tonnages are significantly out of range relative to similar programs.

Analysis

The overall residential waste diversion rate in Ontario for 2016 was 49.2%, compared to 48.4% in 2015.

From 2011 to 2016, Ontario improved its overall diversion rate from 47.8% to 49.2%, an increase of 1.4%. We continue to see a wide range in municipal residential waste diversion rates and tonnages.

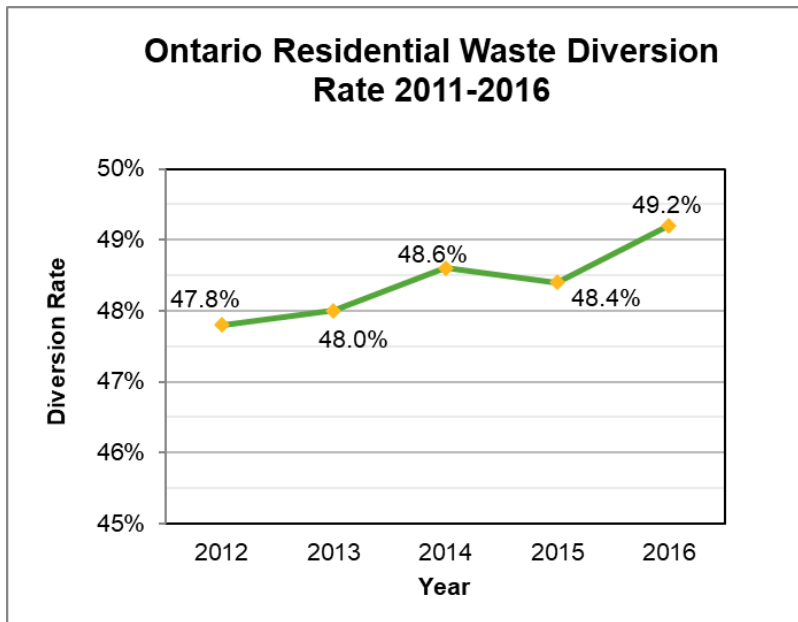


Figure 1: Ontario Residential Waste Diversion Rate 2010-2015

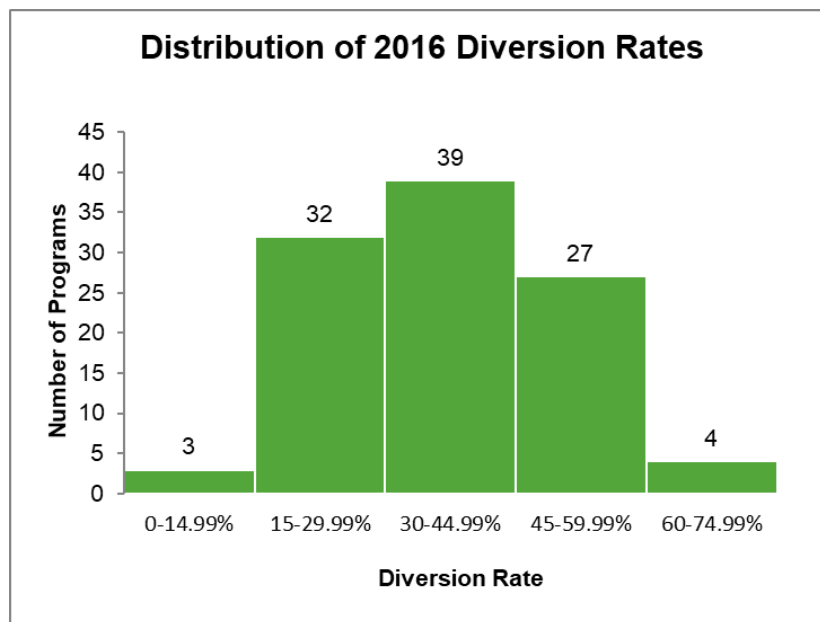


Figure 2: Distribution of 2016 Residential Diversion Rates

Organics and Blue Box materials continue to contribute most to residential waste diversion. In 2016, the diverted materials that contributed most to overall residential waste diversion efforts by weight were organics (39.2%) and Blue Box recyclables (42.8%), as illustrated in Figure 3.

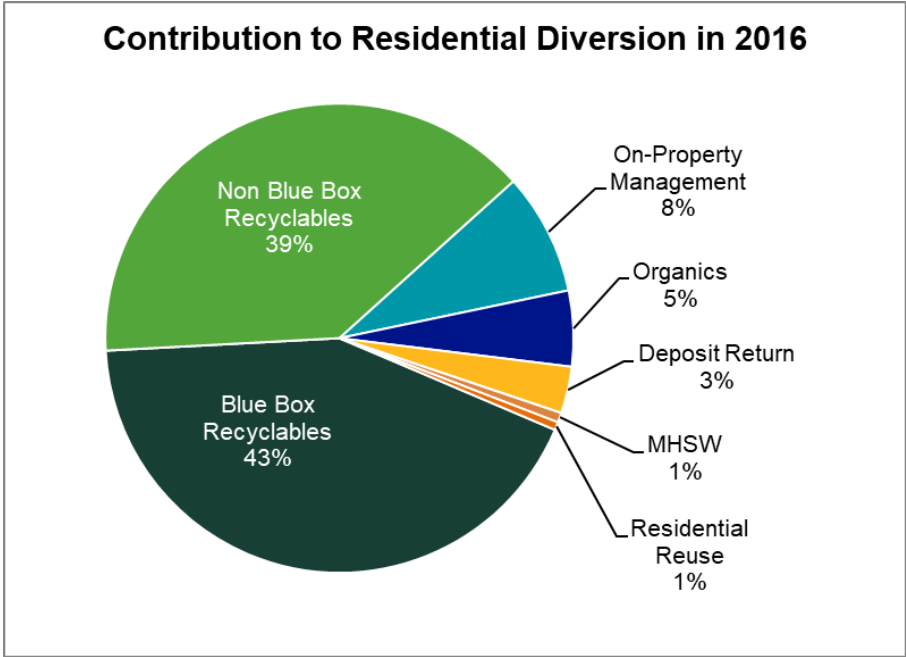


Figure 3: Contribution to Residential Diversion in 2016

For further information, please contact atacall@rpra.ca.