

# SOLID WASTE DIVERSION AND DISPOSAL

CANADIAN ENVIRONMENTAL SUSTAINABILITY INDICATORS



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# CANADIAN ENVIRONMENTAL SUSTAINABILITY INDICATORS SOLID WASTE DIVERSION AND DISPOSAL

# January 2024

# **Table of contents**

Solid waste diversion and disposal	5
National solid waste diversion and disposal	5
Key results	5
Solid waste diversion and disposal per person	6
Solid waste diversion and disposal per person by jurisdiction	7
Solid waste diversion rate	9
Solid waste diversion rate by jurisdiction	9
Solid waste diversion by type of material	11
About the indicators	12
What the indicators measure	12
Why these indicators are important	12
Related initiatives	12
Related indicators	12
Data sources and methods	13
Data sources	13
Methods	13
Recent changes	13
Caveats and limitations	13
Resources	14
References	14
Related information	14

Annex	15
Annex A. Data tables for the figures presented in this document	15
List of Figures	
Figure 1. Solid waste diversion and disposal, Canada, 2002 to 2020	5
Figure 2. Solid waste diversion and disposal per person, Canada, 2002 to 2020	7
Figure 3. Solid waste diversion and disposal per person, by jurisdiction, Canada, 2020	8
Figure 4. Solid waste diversion rate by source, Canada, 2002 to 2020	9
Figure 5. Solid waste diversion rate from all sources by jurisdiction, Canada, 2002 and 2020	10
Figure 6. Solid waste diversion by type of material, Canada, 2002 to 2020	11
List of Tables	
Table A.1. Data for Figure 1. Solid waste diversion and disposal, Canada, 2002 to 2020	15
Table A.2. Data for Figure 2. Solid waste diversion and disposal per person, Canada, 2002 to 2020	16
Table A.3. Data for Figure 3. Solid waste diversion and disposal per person, by jurisdiction, Canada,	202016
Table A.4. Data for Figure 4. Solid waste diversion rate by source, Canada, 2002 to 2020	17
Table A.5. Data for Figure 5. Solid waste diversion rate from all sources by jurisdiction, Canada, 200, 2020	
Table A.6. Data for Figure 6. Solid waste diversion by type of material, Canada, 2002 to 2020	18

# Solid waste diversion and disposal

The way our economies extract, use, then dispose of resources is putting pressure on natural systems, communities and public health. Preventing and diverting waste by reusing, repairing, refurbishing, remanufacturing, repurposing, recycling and composting is a key component of a more <u>circular economy</u> which can help reduce the impact of solid waste on the environment. The circular economy seeks to keep products, materials and resources in use for as long as possible and then divert them from landfills to be reused in some way. Currently, most garbage collected for disposal ends up in landfills and a small amount is incinerated. This can lead to air pollutant emissions, land disturbance and water pollution. The extraction and processing of new resources needed to replace those discarded as waste leads to more pollution.

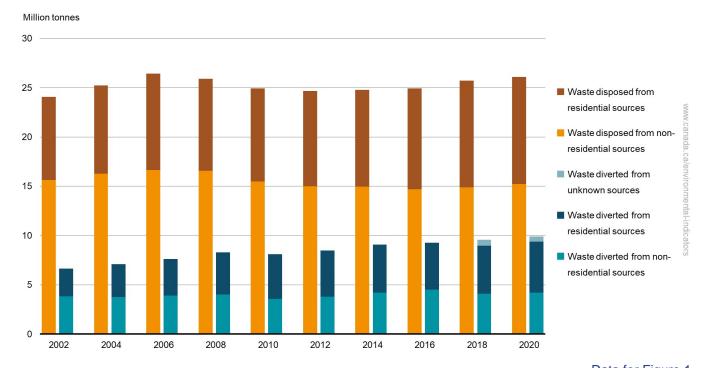
This indicator tracks the amount of solid waste diverted and disposed of in Canada. It tracks progress on the <a href="2022">2026 Federal Sustainable Development Strategy</a>, supporting the target: By 2030, reduce the amount of waste Canadians send to disposal by 30%, from a 2014 baseline.

# National solid waste diversion and disposal

# **Key results**

- From 2002 to 2020.
  - the total amount of solid waste generated in Canada increased by 5.3 million tonnes (or 17%) to reach 36.0 million tonnes
  - o the amount of waste diverted increased by 3.3 million tonnes (or 49%) to reach 9.9 million tonnes
  - the amount of waste disposed in landfills or incinerated increased by 2.0 million tonnes (or 8%) to reach 26.1 million tonnes
- In 2020, 27.5% of solid waste generated in Canada was diverted, while the remaining 72.5% was sent for disposal

Figure 1. Solid waste diversion and disposal, Canada, 2002 to 2020



Data for Figure 1

**Note:** For 2018 and 2020, electronic and tire waste was assigned to the "unknown sources" category since it could not be attributed to either residential or non-residential sources.

Source: Statistics Canada (2021) <u>Table 38-10-0033-01</u>. Archived - Materials diverted, by source, inactive. Statistics Canada (2023) <u>Table 38-10-0032-01</u>. Disposal of waste, by source. Statistics Canada (2022) <u>Table 38-10-0138-01</u>. Waste materials diverted, by type and by source.

Waste refers to any non-hazardous or hazardous material that is discarded and managed at recycling facilities or disposal sites. More specifically, "solid waste" refers to recyclables, organic materials (such as food waste) and garbage generated by residential sources (households) and non-residential sources, which include the industrial, commercial and institutional sectors and the construction, renovation and demolition sectors.<sup>1,2</sup>

In 2020, residential sources were responsible for 52% of diverted solid waste<sup>3</sup> and 42% of disposed solid waste. From 2002 to 2020, the amount of solid waste diverted from residential sources increased by 85% (or 2.4 million tonnes), while the amount of waste disposed from residential sources increased by 29% (or 2.4 million tonnes).

In 2020, the non-residential sector was responsible for 43% of diverted waste and 58% of disposed solid waste. From 2002 to 2020, the amount of waste diverted increased by 9% (or 0.4 million tonnes), while the amount of solid waste disposed from the non-residential sector dropped by 2.5% (or 0.4 million tonnes).

In Canada, the responsibility for managing and reducing waste is shared among federal, provincial, territorial and municipal governments. Municipalities and private waste management firms manage the collection, diversion and disposal of residential and non-residential solid waste. Provincial and territorial authorities establish waste reduction policies and programs, approve and monitor waste management facilities and operations. The federal government controls the international and interprovincial movement of hazardous recyclables and waste, as well as identifies approaches and best practices to reduce pollutant releases and greenhouse gas emissions from the waste management sector.

# Solid waste diversion and disposal per person

### **Key results**

- Between 2002 and 2020.
  - o total solid waste diversion per person increased by 23% from 212 to 261 kilograms (kg)
  - solid waste disposal per person decreased by 11% from 768 to 687 kg
- Between 2014 and 2020<sup>4</sup>, solid waste disposal per person decreased by almost 2% from 699 kg to 687 kg

<sup>&</sup>lt;sup>1</sup> For more details about what constitutes solid waste in the context of this indicator, please refer to the Data sources and methods.

<sup>&</sup>lt;sup>2</sup> Non-residential non-hazardous solid waste are those wastes generated by all sources excluding the residential waste stream. These include: industrial materials, which are generated by manufacturing, primary and secondary industries and are managed off-site from the manufacturing operation; commercial materials, which are generated by commercial operations (for example, shopping centres, restaurants and offices); and institutional materials, which are generated by institutional facilities (for example, schools, hospitals, government facilities, seniors homes and universities). Also included are construction, renovation and demolition non-hazardous waste, and can include materials such as: wood, drywall, certain metals, cardboard, doors, windows and wiring. It excludes materials from land clearing on areas not previously developed, as well as materials that include asphalt, concrete, bricks and clean sand or gravel.

<sup>&</sup>lt;sup>3</sup> For 2018 and 2020, electronic and tire waste could not be attributed to either residential or non-residential sources.

<sup>&</sup>lt;sup>4</sup> This indicator tracks progress on the <u>2022 to 2026 Federal Sustainable Development Strategy</u>, supporting the target: By 2030, reduce the amount of waste Canadians send to disposal by 30%, from a 2014 baseline of 699 kilograms per person.

Kilograms per person 900 800 Waste disposed from 700 residential sources 600 Waste disposed from nonresidential sources 500 ■ Waste diverted from unknown sources 400 ■ Waste diverted from 300 residential sources ■ Waste diverted from non-200 residential sources 100 0 2002 2004 2006 2008 2010 2012 2014 2016 2018 2020

Figure 2. Solid waste diversion and disposal per person, Canada, 2002 to 2020

Data for Figure 2

**Note:** For 2018 and 2020, electronic and tire waste was assigned to the "unknown sources" category since it could not be attributed to either residential or non-residential sources.

Source: Statistics Canada (2021) <u>Table 38-10-0033-01</u>. <u>Archived - Materials diverted, by source, inactive</u>. Statistics Canada (2022) <u>Table 17-10-0005-01</u>. <u>Population estimates on July 1st, by age and sex</u>. Statistics Canada (2023) <u>Table 38-10-0032-01</u>. <u>Disposal of waste, by source</u>. Statistics Canada (2022) <u>Table 38-10-0138-01</u>. Waste materials diverted, by type and by source.

Waste diversion per person from residential sources increased steadily between 2002 and 2014 but dropped slightly in 2016.<sup>5</sup> Overall from 2002 to 2020, waste diversion per person from residential sources increased by 53% (or 47 kg). Waste diversion per person from non-residential sources fluctuated over this same period. Between 2002 and 2020, waste diversion per person from non-residential sources decreased by 10% (or 12 kg).

From 2002 to 2020, waste disposal per person from residential sources increased from 269 to 286 kg (or 6%) while disposal per person from non-residential sources declined from 499 to 401 kg (or 20%).

# Solid waste diversion and disposal per person by jurisdiction

# **Key results**

 In 2020, solid waste diversion per person and solid waste disposal per person varied widely across Canada

- waste diversion was lowest in Newfoundland and Labrador at 91 kg per person and highest in both Prince Edward Island and British Columbia at 358 kg per person
- waste disposal was lowest in Prince Edward Island at 346 kg per person and highest in Alberta at 916 kg per person

<sup>&</sup>lt;sup>5</sup> For 2018 and 2020, electronic and tire waste could not be attributed to either residential or non-residential sources.

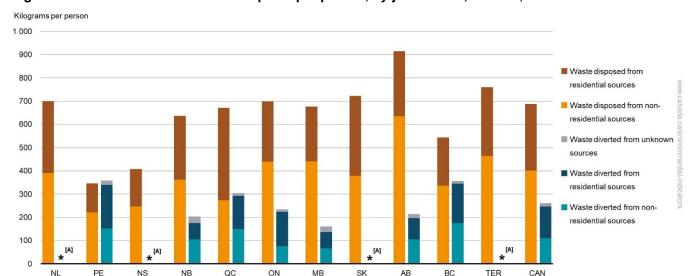


Figure 3. Solid waste diversion and disposal per person, by jurisdiction, Canada, 2020

#### Data for Figure 3

**Note:** TER = Yukon, the Northwest Territories and Nunavut. <sup>[A]</sup> suppressed value due to confidentiality. For 2018 and 2020, electronic and tire waste was assigned to the "unknown sources" category since it could not be attributed to either residential or non-residential sources. Totals may not add up due to suppressed values to maintain confidentiality.

Source: Statistics Canada (2022) <u>Table 17-10-0005-01</u>. <u>Population estimates on July 1st, by age and sex</u>. Statistics Canada (2023) <u>Table 38-10-0032-01</u>. Disposal of waste, by source. Statistics Canada (2022) <u>Table 38-10-0138-01</u>. Waste materials diverted, by type and by source.

In 2020, national solid waste diversion was 261 kg per person. Prince Edward Island, Nova Scotia, Quebec and British Columbia all diverted more waste per person than the national average. New Brunswick, Ontario, Manitoba, Saskatchewan, Alberta and the territories (Yukon, the Northwest Territories and Nunavut) diverted between 160 kg per person and 228 kg per person. Newfoundland and Labrador diverted less than 100 kg of solid waste per person.

Only New Brunswick, Alberta, and the territories (Yukon, the Northwest Territories and Nunavut) diverted more solid waste from non-residential sources than from residential sources. In Newfoundland and Labrador, Quebec, Manitoba and British Columbia, residential sources and non-residential sources diverted a similar amount of solid waste. In Prince Edward Island, Nova Scotia, Ontario and Saskatchewan, more waste was diverted from residential sources than non-residential sources.

In 2020, national solid waste disposal was 687 kg per person. Prince Edward Island, Nova Scotia and British Columbia disposed less than 550 kg of solid waste per person. Newfoundland and Labrador, Saskatchewan, Alberta and the territories (Yukon, the Northwest Territories and Nunavut) all disposed 700 kg or more of waste per person in 2020.

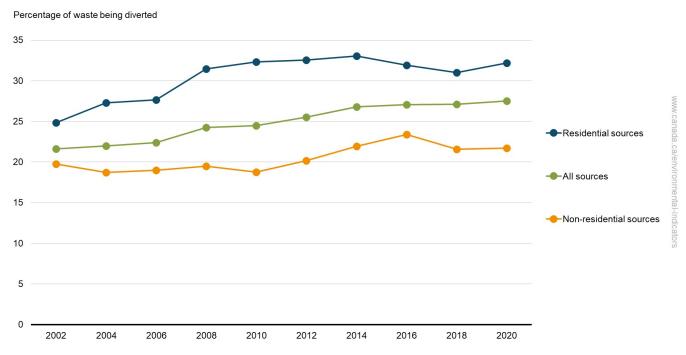
Quebec was the only jurisdiction where more waste per person was disposed from residential sources than from non-residential sources. In all other jurisdictions, more waste was disposed from non-residential sources than residential sources.

# Solid waste diversion rate

# **Key results**

- Between 2002 and 2020,6 the share of solid waste being diverted
  - o from all sources increased from 22% to 28%
  - o from residential sources increased from 25% to 32%
  - o from non-residential sources increased from 20% to 22%

Figure 4. Solid waste diversion rate by source, Canada, 2002 to 2020



Data for Figure 4

**Note:** For 2018 and 2020, electronic and tire waste could not be attributed to either residential or non-residential sources; however, it remains included in the "All sources" category and explains the slight increase in this category compared to the "Residential sources" and "Non-residential sources" categories, which are showing a decrease.

Source: Statistics Canada (2021) <u>Table 38-10-0033-01</u>. <u>Archived - Materials diverted, by source, inactive</u>. Statistics Canada (2023) <u>Table 38-10-0032-01</u>. <u>Disposal of waste, by source</u>. <u>Statistics Canada (2022) <u>Table 38-10-0138-01</u>. <u>Waste materials diverted, by type and by source</u>.</u>

Between 2002 and 2020, solid waste diversion from residential sources increased by 85% (or 2.4 million tonnes). Diversion from non-residential sources increased by 9% (or 0.4 million tonnes).

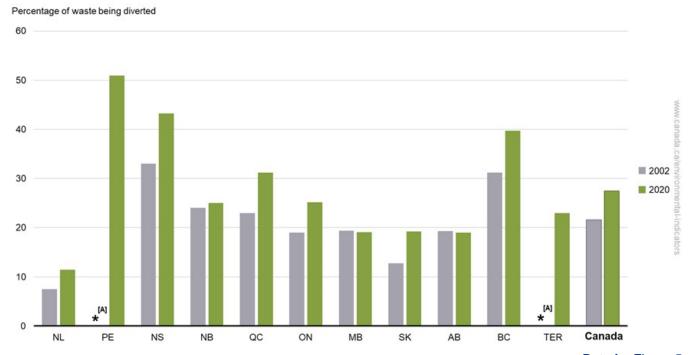
# Solid waste diversion rate by jurisdiction

#### **Key results**

- Between 2002 and 2020, the share of solid waste being diverted
  - o decreased slightly in Manitoba and Alberta
  - o increased in all other jurisdictions where data are available

<sup>&</sup>lt;sup>6</sup> For 2018 and 2020, electronic and tire waste could not be attributed to either residential or non-residential sources.

Figure 5. Solid waste diversion rate from all sources by jurisdiction, Canada, 2002 and 2020



Data for Figure 5

**Note:** TER = Yukon, the Northwest Territories and Nunavut. [A] In 2002, solid waste diversion and disposal data were not available for Prince Edward Island and the territories (Yukon, the Northwest Territories and Nunavut).

Source: Statistics Canada (2021) <u>Table 38-10-0033-01</u>. <u>Archived - Materials diverted, by source, inactive</u>. Statistics Canada (2023) <u>Table 38-10-0032-01</u>. <u>Disposal of waste, by source</u>. <u>Statistics Canada (2022) <u>Table 38-10-0138-01</u>. <u>Waste materials diverted, by type and by source</u>.</u>

Between 2002 and 2020, Nova Scotia had the largest increase in solid waste diversion, rising from 33% to 43%. Over the same period, Manitoba and Alberta were the only jurisdictions with decreases in diversion, falling slightly from 19.3% to 19.0% and from 19.4% to 19.1%, respectively.

In 2020, solid waste diversion rates varied across Canada from 11% in Newfoundland and Labrador to 51% in Prince Edward Island. Nationally, 28% of solid waste was diverted. Newfoundland and Labrador, Manitoba, Saskatchewan and Alberta diverted less than 20% of solid waste. New Brunswick, Ontario and the territories (Yukon, the Northwest Territories and Nunavut) each diverted around 25% of solid waste, while Prince Edward Island, Nova Scotia, Quebec and British Columbia diverted more than 30% of solid waste.

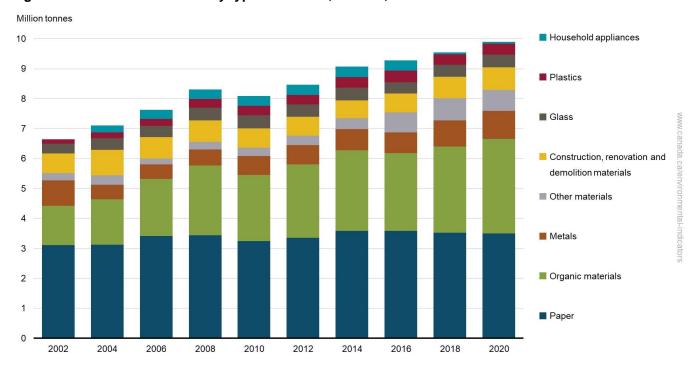
Comparatively, in 2002, solid waste diversion rates ranged from 7% in Newfoundland and Labrador to 33% in Nova Scotia. Nationally, 22% of solid waste was diverted. Newfoundland and Labrador, Ontario, Manitoba, Saskatchewan and Alberta diverted less than 20% of solid waste. New Brunswick and Quebec diverted almost 25% of solid waste, while Nova Scotia and British Columbia diverted more than 30% of solid waste. In 2002, solid waste diversion and disposal data were not available for Prince Edward Island and the territories (Yukon, the Northwest Territories and Nunavut).

# Solid waste diversion by type of material

# **Key results**

- Between 2002 and 2020, solid waste diversion increased by 49%, from 6.6 million tonnes to 9.9 million tonnes
- In 2020, paper and organic materials accounted for 67% of total solid waste diverted (3.5 and 3.2 million tonnes, respectively)

Figure 6. Solid waste diversion by type of material, Canada, 2002 to 2020



#### Data for Figure 6

**Note:** "Paper" may include newsprint, cardboard and boxboard and mixed paper. "Organic materials" may include leaves, grass, yard trimmings, agricultural crop residues, wood waste, and paper and paperboard products or food scraps. "Metals" may include ferrous metals, copper and aluminum and mixed metals. "Other materials" includes non-hazardous materials that were reported as diverted but were not included in any of the specified categories. "Other materials" may include electronics, tires, gable top and aseptic containers, textiles and other unclassified materials. "Construction, renovation and demolition materials" may include materials such as brick, painted wood, drywall, metals, cardboard, doors, windows and wiring.

**Source:** Statistics Canada (2021) <u>Table 38-10-0034-01.</u> Archived - <u>Materials diverted, by type, inactive.</u> Statistics Canada (2022) <u>Table 38-10-0138-01.</u> Waste materials diverted, by type and by source.

From 2002 to 2020, diversion of all materials increased. Although diversion of plastics increased by 155% between 2002 and 2020, diversion of plastics remains extremely limited, representing less than 4% of all solid waste diversion. Over the same period, diversion of organic materials increased by 141%. In 2020, organic materials represented 32% of all diverted material, second only to paper at 35%.

# About the indicators

#### What the indicators measure

These indicators report on the total quantity and the quantity per person of non-hazardous solid waste diverted and disposed by municipal governments and businesses in the waste management industry. The waste diversion rate by source (residential and non-residential) and the types of materials diverted are also reported.

# Why these indicators are important

Tracking trends in solid waste diversion and disposal helps us understand how waste management and recycling programs are working. It also provides a measure of how efficiently Canadians use their resources, which have implications for the natural environment. For example, when we reuse, recycle or compost materials we generally reduce overall energy use and greenhouse gas emissions from their production and use.<sup>7</sup>

The Government of Canada is working with all levels of government, industry, non-government organizations, researchers and the public to take action on waste and pollution. A <u>Canada-wide Action Plan on Zero Plastic</u> <u>Waste</u> has been adopted to help better prevent, reduce, reuse, recover, capture and clean up plastic waste and pollution in Canada. The federal government is also working to support and expand the <u>circular economy</u> to create new economic opportunities and a more sustainable and resilient economy.

#### Related initiatives

These indicators support the measurement of progress towards the following 2022 to 2026 Federal Sustainable Development Strategy Goal 12: Reduce waste and transition to zero-emission vehicles.

In addition, the indicators contribute to the <u>Sustainable Development Goals of the 2030 Agenda for Sustainable Development</u>. They are linked to Goal 12, Responsible consumption and production and Target 12.5, "By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse."

#### Related indicators

The <u>Greenhouse gas emissions</u> indicators report trends in total anthropogenic (human-made) GHG emissions at the national level, per person and per unit gross domestic product, by province and territory and by economic sector, waste being one.

The <u>Air pollutant emissions</u> indicators track emissions from human activities of 6 key air pollutants: sulphur oxides (SO<sub>x</sub>), nitrogen oxides (NO<sub>x</sub>), volatile organic compounds (VOCs), ammonia (NH<sub>3</sub>), carbon monoxide (CO) and fine particulate matter (PM<sub>2.5</sub>). Black carbon, which is a component of PM<sub>2.5</sub>, is also reported. For each air pollutant, data are provided at the national, provincial/territorial and facility level and by major source, waste being one.

The <u>Emissions of harmful substances to air</u> indicators track human-related emissions to air of 3 toxic substances, namely mercury, lead and cadmium, and their compounds. For each substance, data are provided at the national, provincial/territorial and facility level and by source. Global emissions to air are also provided for mercury.

The <u>Releases of harmful substances to water</u> indicators track human-related releases to water of 3 toxic substances, namely mercury, lead and cadmium, and their compounds. For each substance, data are provided at the national, provincial/territorial and facility level and by source.

<sup>&</sup>lt;sup>7</sup> Turner DA, Williams ID and Kemp S (2015) <u>Greenhouse gas emission factors for recycling of source-segregated waste materials</u>. Retrieved on August 28, 2023.

# Data sources and methods

#### **Data sources**

The data used for the Solid waste diversion and disposal indicators comes from a Statistics Canada survey, carried out biennially. The most recent survey was conducted in 2020 and the results were released in 2022.

Biennial Waste Management Survey

Population data also come from Statistics Canada. Data were retrieved on August 28, 2023.

Statistics Canada (2022) Table 17-10-005-01. Population estimates on July 1st, by age and sex

#### More information

For these indicators, waste includes non-hazardous solid wastes from residential and non-residential (industrial, commercial and institutional) sources disposed of or diverted through municipal governments and the waste management industry.

Solid waste refers to recyclables, organic materials and garbage generated by homes, businesses and institutions.

Disposed waste includes waste materials sent to landfills, to incinerators or to facilities that generate energy from waste.

Diverted waste includes waste materials that go through any physical transformation, such as composting, separation or sorting in preparation for recycling or reuse.

#### **Methods**

The indicators represent the weight of all types of material diverted and disposed from residential and non-residential sources. The diversion rate is the percentage of waste diverted relative to the total waste disposed and diverted as reported to the waste management survey.

Waste diverted and disposed per person was calculated by dividing the total quantity of diverted or disposed waste by a jurisdiction's population estimate.

# **Recent changes**

Jurisdictional comparisons for 2018 and 2020 were included to compare diversion rates and the amount of waste disposed and diverted per person across Canada.

For the results of the 2020 waste survey, Statistics Canada created a new data table, <u>Table 38-10-0138-01</u>. <u>Waste materials diverted, by type and by source</u> to capture the 2018 and 2020 solid waste diversion results. This data table replaces 2 separate data tables that were used for the 2002 to 2016 diversion results, <u>Table 38-10-0034-01</u>. Archived - <u>Materials diverted</u>, by type, inactive and <u>Table 38-10-0033-01</u>. Archived - <u>Materials diverted</u>, by source, inactive. For the 2018 and 2020 results, Statistics Canada did not provide residential source and non-residential source totals because electronic and tire source data were unavailable.

#### Caveats and limitations

The survey values were imputed when values were missing or when the respondent did not complete a questionnaire even after extensive follow-up.

The indicator excludes material that bypasses the waste management stream captured by the survey. This includes materials not processed in a material recycling facility, such as material recycled directly by retailers, or the reuse of bottles handled through a bottle-return program.

The data are for waste collected, and total waste generated is not tracked. For example, littering, dumping or storing waste is not accounted for.

Municipal and business waste collection operations must meet Statistics Canada's reporting thresholds in order to be covered by the municipal and business waste management surveys. As such, very small waste collection operations may not be covered.

Some data values may not be available for specific reference periods. In other circumstances, Statistics Canada suppresses data values to meet confidentiality requirements under the *Statistics Act*.

# Resources

#### References

Babooram A and Wang J (2007) Recycling in Canada (Archived content). Statistics Canada. Retrieved on August 28, 2023.

Statistics Canada (2012) <u>Human Activity and the Environment. Waste management in Canada (Archived content)</u>. Retrieved on August 28, 2023.

Statistics Canada (2022) North American Industry Classification System (NAICS) Canada 2017 Version 3.0. Retrieved on August 28, 2023.

Statistics Canada (2023) Solid waste and hazardous substances. Retrieved on August 28, 2023.

#### Related information

Waste

Municipal solid waste management

# **Annex**

# Annex A. Data tables for the figures presented in this document

Table A.1. Data for Figure 1. Solid waste diversion and disposal, Canada, 2002 to

Year	Waste diverted from non-residential sources (million tonnes)	Waste diverted from residential sources (million tonnes)	Waste diverted from unknown sources (million tonnes)	Total Waste diverted (million tonnes)	Waste disposed from non-residential sources (million tonnes)	Waste disposed from residential sources (million tonnes)	Total Waste disposed (million tonnes)
2002	3.852	2.790	n/a	6.642	15.635	8.447	24.081
2004	3.749	3.364	n/a	7.113	16.265	8.962	25.227
2006	3.904	3.723	n/a	7.627	16.669	9.748	26.417
2008	4.010	4.301	n/a	8.311	16.566	9.360	25.926
2010	3.580	4.516	n/a	8.096	15.504	9.448	24.952
2012	3.794	4.671	n/a	8.465	14.997	9.685	24.681
2014	4.225	4.850	n/a	9.075	14.963	9.804	24.767
2016	4.491	4.784	n/a	9.275	14.715	10.226	24.941
2018	4.095	4.863	0.593	9.551	14.885	10.848	25.733
2020	4.215	5.163	0.526	9.903	15.246	10.862	26.108

**Note:** n/a = not applicable. For 2018 and 2020, electronic and tire waste was assigned to the "unknown sources" category since it could not be attributed to either residential or non-residential sources. Totals may not add up due to rounding.

Source: Statistics Canada (2021) <u>Table 38-10-0033-01</u>. <u>Archived - Materials diverted, by source, inactive</u>. Statistics Canada (2023) <u>Table 38-10-0032-01</u>. <u>Disposal of waste, by source</u>. Statistics Canada (2022) <u>Table 38-10-0138-01</u>. <u>Waste materials diverted, by type and by source</u>.

Table A.2. Data for Figure 2. Solid waste diversion and disposal per person, Canada, 2002 to

Year	Waste diverted from non-residential sources (kilograms per person)	Waste diverted from residential sources (kilograms per person)	Waste diverted from unknown sources (kilograms per person)	Total waste diverted (kilograms per person)	Waste disposed from non-residential sources (kilograms per person)	Waste disposed from residential sources (kilograms per person)	Total waste disposed (kilograms per person)
2002	123	89	n/a	212	499	269	768
2004	117	105	n/a	223	509	281	790
2006	120	114	n/a	234	512	299	811
2008	121	129	n/a	250	498	282	780
2010	105	133	n/a	238	456	278	734
2012	109	135	n/a	244	432	279	711
2014	119	137	n/a	256	422	277	699
2016	124	132	n/a	257	408	283	691
2018	110	131	16	258	402	293	694
2020	111	136	14	261	401	286	687

**Note:** n/a = not applicable. For 2018 and 2020, electronic and tire waste was assigned to the "unknown sources" category since it could not be attributed to either residential or non-residential sources. Totals may not add up due to rounding.

Source: Statistics Canada (2021) Table 38-10-0033-01. Archived - Materials diverted, by source, inactive. Statistics Canada (2022) Table 17-10-0005-01. Population estimates on July 1st, by age and sex. Statistics Canada (2023) Table 38-10-0032-01. Disposal of waste, by source. Statistics Canada (2022) Table 38-10-0138-01. Waste materials diverted, by type and by source.

Table A.3. Data for Figure 3. Solid waste diversion and disposal per person, by jurisdiction, Canada,

Jurisdiction	Waste diverted from non- residential sources (kilograms per person)	Waste diverted from residential sources (kilograms per person)	Waste diverted from unknown sources (kilograms per person)	Total waste diverted (kilograms per person)	Waste disposed from non- residential sources (kilograms per person)	Waste disposed from residential sources (kilograms per person)	Total waste disposed (kilograms per person)
Newfoundland and Labrador	x	x	x	91	391	309	700
Prince Edward Island	152	188	18	358	221	125	346
Nova Scotia	х	Х	Х	310	247	161	407
New Brunswick	106	70	27	212	362	275	637
Quebec	150	142	13	305	273	398	671
Ontario	76	148	11	235	440	259	699
Manitoba	66	71	23	160	441	236	677
Saskatchewan	х	х	Х	172	378	345	723
Alberta	106	91	17	215	635	280	916
British Columbia	175	170	12	358	337	207	544

Yukon, the Northwest Territories and							
Nunavut	x	х	x	228	465	295	760
Canada	111	136	14	261	401	286	687

**Note:** x = suppressed value due to confidentiality. For 2018 and 2020, electronic and tire waste was assigned to the "unknown sources" category since it could not be attributed to either residential or non-residential sources. Totals may not add up due to suppressed values to maintain confidentiality.

Source: Statistics Canada (2022) <u>Table 17-10-0005-01</u>. Population estimates on July 1st, by age and sex. Statistics Canada (2023) <u>Table 38-10-0032-01</u>. Disposal of waste, by source. Statistics Canada (2022) <u>Table 38-10-0138-01</u>. Waste materials diverted, by type and by source.

Table A.4. Data for Figure 4. Solid waste diversion rate by source, Canada, 2002 to

Year	Residential sources (percentage of waste being diverted)	Non-residential sources (percentage of waste being diverted)	All sources (percentage of waste being diverted)
2002	24.8	19.8	21.6
2004	27.3	18.7	22.0
2006	27.6	19.0	22.4
2008	31.5	19.5	24.3
2010	32.3	18.8	24.5
2012	32.5	20.2	25.5
2014	33.1	22.0	26.8
2016	31.9	23.4	27.1
2018	31.0	21.6	27.1
2020	32.2	21.7	27.5

**Note:** For 2018 and 2020, electronic and tire waste could not be attributed to either residential or non-residential sources; however, it remains included in the "All sources" category and explains the slight increase in this category compared to the "Residential sources" and "Non-residential sources" categories, which are showing a decrease.

Source: Statistics Canada (2021) <u>Table 38-10-0033-01</u>. Archived - Materials diverted, by source, inactive. Statistics Canada (2023) <u>Table 38-10-0032-01</u>. Disposal of waste, by source. Statistics Canada (2022) <u>Table 38-10-0138-01</u>. Waste materials diverted, by type and by source.

Table A.5. Data for Figure 5. Solid waste diversion rate from all sources by jurisdiction, Canada, 2002 and

Jurisdiction	2002 (percentage of waste being diverted)	2020 (percentage of waste being diverted)
Newfoundland and Labrador	7.5	11.5
Prince Edward Island	n/a <sup>[A]</sup>	50.9
Nova Scotia	33.0	43.2
New Brunswick	24.0	25.0
Quebec	23.0	31.2
Ontario	19.0	25.2
Manitoba	19.4	19.1
Saskatchewan	12.8	19.2
Alberta	19.3	19.0
British Columbia	31.2	39.7
Yukon, the Northwest Territories and Nunavut	n/a <sup>[A]</sup>	23.0
Canada	21.6	27.5

**Note:** n/a = not available. [A] In 2002, solid waste diversion and disposal data were not available for Prince Edward Island and the territories (Yukon, the Northwest Territories and Nunavut).

Source: Statistics Canada (2021) <u>Table 38-10-0033-01</u>. <u>Archived - Materials diverted, by source, inactive</u>. Statistics Canada (2023) <u>Table 38-10-0032-01</u>. <u>Disposal of waste, by source</u>. <u>Statistics Canada (2022) <u>Table 38-10-0138-01</u>. Waste materials diverted, by type and by source.</u>

Table A.6. Data for Figure 6. Solid waste diversion by type of material, Canada, 2002 to

Year	Paper (million tonnes)	Organic materials (million tonnes)	Metals (million tonnes)	Other materials (million tonnes)	Construction, renovation and demolition materials (million tonnes)	Plastics (million tonnes)	Glass (million tonnes)	Household appliances (million tonnes)
2002	3.110	1.311	0.853	0.248	0.646	0.144	0.329	n/a
2004	3.126	1.520	0.483	0.312	0.848	0.192	0.395	0.237
2006	3.421	1.906	0.477	0.197	0.715	0.232	0.378	0.299
2008	3.438	2.332	0.536	0.253	0.720	0.297	0.421	0.313
2010	3.247	2.212	0.630	0.273	0.653	0.313	0.435	0.333
2012	3.356	2.453	0.646	0.309	0.637	0.319	0.412	0.334
2014	3.591	2.687	0.709	0.360	0.593	0.360	0.428	0.349
2016	3.585	2.596	0.692	0.671	0.632	0.388	0.380	0.331
2018	3.520	2.879	0.874	0.741	0.722	0.355	0.397	0.063
2020	3.503	3.153	0.932	0.710	0.751	0.368	0.424	0.063

**Note:** n/a = not available. "Paper" may include newsprint, cardboard and boxboard and mixed paper. "Organic materials" may include leaves, grass, yard trimmings, agricultural crop residues, wood waste, and paper and paperboard products or food scraps. "Metals" may include ferrous metals, copper and aluminum and mixed metals. "Other materials" includes non-hazardous materials that were reported as diverted but were not included in any of the specified categories. "Other materials" may include electronics, tires, gable top and aseptic containers, textiles and other unclassified materials. "Construction, renovation and demolition materials" may include materials such as brick, painted wood, drywall, metals, cardboard, doors, windows and wiring.

**Source:** Statistics Canada (2021) <u>Table 38-10-0034-01. Archived - Materials diverted, by type, inactive.</u> Statistics Canada (2022) <u>Table 38-10-0138-01. Waste materials diverted, by type and by source.</u>

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