

Garbage & Climate Change



What's in our garbage?

In most jurisdictions across Canada, the two largest components of residential waste are compostables and household recyclables. In Canada, the typical content of residential garbage is :

40% compostables (e.g. food and yard waste)

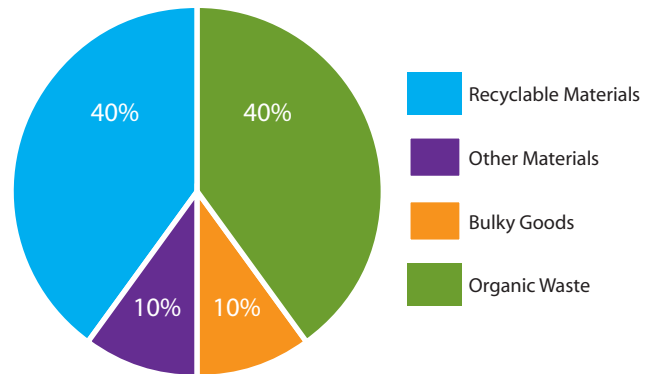
40% recyclable materials (e.g. paper, cardboard, plastics, glass and metals)

10% bulky goods (e.g. appliances, furniture, mattresses)

10% other materials (e.g. packaging and household hazardous waste).

While the Sunshine Coast has not had a waste composition study, the types of materials being disposed can be estimated by looking at waste composition studies from other jurisdictions with similar characteristics. Recent estimates for the Sunshine Coast demonstrate this same trend: compostables are estimated to be about 34% of our residential waste, while household recyclables are estimated to make up about 30%.

Typical content of residential waste in Canada



Why is it important to know what's in our garbage?

- Compostables and recyclables, take up about 60 % of what goes to landfill on the Sunshine Coast – this highlights where to focus our efforts to reduce landfill size and emissions.
- Compostables (like food and yard waste, paper and cardboard) generate methane as they break down in the landfill. Although much less abundant, methane absorbs 20 times as much heat energy as carbon dioxide. Methane is a greenhouse powerhouse, because its contribution to the green house effect is large in proportion to its abundance in the atmosphere.

For more about the link between garbage and climate change, turn the page.

¹ Taken from FCM's "Getting to 50% and beyond: Waste Diversion Success Stories from Canadian Municipalities" [click here to see the FCM publication](#)

² The Powell River Regional District is considered to be fairly similar to the SCRD, in that it is a coastal community with a fairly small population with distinct urban and rural areas. Powell River's waste composition study has been used to calculate sunshine coast waste composition estimates.

³ Although it makes up only 1/200th (0.5%) as much of the atmosphere as carbon dioxide, methane contributes 1/3 as much to the greenhouse effect as carbon dioxide (p.25-26 in *The Rough Guide to Climate Change*, by Robert Henson, 2008, Penguin Books Canada).



Interconnected Challenges & Solutions

Climate Change and Garbage

Local governments are working together on a regional Energy and Emissions Plan to guide the Sunshine Coast's actions in shrinking our contribution to climate change.

In order to effectively measure reductions, the first step was to find out where local emissions come from. The emissions inventory shows that landfills contribute 7% of the greenhouse gases currently emitted on the Sunshine Coast. While other areas contribute much higher emissions (e.g. transportation and industry), reducing the emissions from landfill is something all of us can help reduce.

Current Sunshine Coast Emissions

Transportation	35%
Industry	32%
Agricultural Land Conversion	15%
Residential	8%
Solid Waste	7%
Commercial	3%

How do we shrink the landfill's contribution to climate change? ...Shrink what we send to the landfill!



Reducing garbage

(by less purchasing, careful purchasing and reusing and repairing items)

Recycling

(household items like metals, plastics, paper, cardboard, including compostables)

When we reduce, reuse, recycle we are also reducing the:

- **Energy** used in extraction, manufacturing and transportation of new goods
- **Emissions** associated with extracting, transporting and manufacturing goods
- **Waste** that is generated during production that we never see –
- **Methane emissions** associated with decomposition of paper products, food and yard waste in landfills.

To learn more about the links between garbage and climate change please visit:

[Natural Resources Canada on Solid Waste and Climate Change](#)

[Environmental Protection Agency on Solid Waste and Climate Change](#)

[Solid Waste Association of North America on Climate Change](#)

⁴ See the executive summary or the full report by visiting the [SCRD website here](#)