

BETTER  
WORSE

TYPE	COST	PRODUCTION	DISPOSAL	OVERALL
<b>Reusable</b> 	After initial purchase, cost is reduced with each subsequent use, thus the cheapest option	Input material: variable, but usually high-end plastic (PET), metal or glass  Greenhouse gas emissions: variable	<ul style="list-style-type: none"> <li>• Reusable: Yes</li> <li>• Recyclable: Yes, material depending</li> <li>• Compostable: No</li> <li>• Landfilled: Yes</li> </ul>	While the lowest production/disposal impact is reusable, the issue lies on the provision of reusable containers. Restaurants can incentivize customer use with discounts/benefits for reusable containers. Restaurant deposit infrastructure would be ideal to encourage use for customers
<b>Certified Compostable</b> 	Relatively expensive to purchase	Input material: renewable plant material  Modest greenhouse gas emissions (data NA) from loss of greenhouse gas sinks, plants	<ul style="list-style-type: none"> <li>• Reusable: No</li> <li>• Recyclable: Yes, if cleaned</li> <li>• Compostable: Yes</li> <li>• Landfilled: Yes</li> </ul>	A renewable option with a focus on being compostable, this option while more expensive than paper, offers a simple disposal solution for users: place in an organics bin
<b>Paper</b> 	Relatively inexpensive to purchase	Input material: renewable wood material  Modest greenhouse gas emissions (1.17kg CO2 equivalents per kg) <sup>i</sup> from loss of greenhouse gas sinks, trees	<ul style="list-style-type: none"> <li>• Reusable: No</li> <li>• Recyclable: Yes, if cleaned</li> <li>• Compostable: Potentially -if not plastic lined.</li> <li>• Landfilled: Yes (27% of BC waste is paper products)<sup>ii</sup></li> </ul>	Paper offers an additional renewable option for packaging with recyclable and potential compostable disposal options, offering a relatively inexpensive and environmentally friendly choice
<b>Aluminum</b> 	Relatively expensive to purchase	Input material: non-renewable bauxite ore  Highest greenhouse gas emissions (17.01kg CO2 equivalents per kg) <sup>iii</sup> given high energy requirements in refining and smelting	<ul style="list-style-type: none"> <li>• Reusable: Unlikely</li> <li>• Recyclable: Yes, if cleaned</li> <li>• Compostable: No</li> <li>• Landfilled: Yes (&gt;1% of BC waste is aluminum)<sup>iv</sup></li> </ul>	This option is the most expensive and has the highest production impact when made from virgin materials; however as aluminum can be recycled almost indefinitely, this option becomes attractive if recycled options are chosen (cheaper and uses 95% less energy)
<b>Plastic</b> 	Relatively cheap to purchase	Input material: non-renewable petroleum products (ethylene and benzene)  High greenhouse gas emissions (2.1kg CO2 equivalents per kg) <sup>v</sup>	<ul style="list-style-type: none"> <li>• Reusable: Potentially</li> <li>• Recyclable: Yes, if cleaned</li> <li>• Compostable: No</li> <li>• Landfilled: Yes (14% of BC waste is plastic, 3<sup>rd</sup> highest material)<sup>vi</sup></li> </ul>	This cheap container option has been linked to the Pacific Garbage Patch, causing marine ingestion of plastic, is made from a non-renewable resource and is a problem for end-of-life management as it non-compostable and only recycled if properly cleaned
<b>Polystyrene</b> 	Cheapest to purchase, but may rise given changes to recycling regulations (see full Green2Go Report for more info)	Input material: non-renewable petroleum products (ethylene and benzene)  High greenhouse gas emissions (3.6kg CO2 equivalents per kg) <sup>vii</sup>	<ul style="list-style-type: none"> <li>• Reusable: No</li> <li>• Recyclable: No</li> <li>• Compostable: No</li> <li>• Landfilled: Yes</li> </ul>	The cheapest container option has suspected health concerns, is made from a non-renewable resource and is a problem for end-of-life management as it is non-recyclable and non-compostable

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<sup>i</sup> Environmental impacts per kg of material throughout the life-cycle as calculated by Eco-Invent

<sup>ii</sup> British Columbia's Solid Waste Flow, 2006 Summary Report

<sup>iii</sup> Environmental impacts per kg of material throughout the life-cycle as calculated by Eco-Invent

<sup>iv</sup> British Columbia's Solid Waste Flow, 2006 Summary Report

<sup>v</sup> Environmental impacts per kg of material throughout the life-cycle as calculated by Eco-Invent

<sup>vi</sup> British Columbia's Solid Waste Flow, 2006 Summary Report

<sup>vii</sup> Environmental impacts per kg of material throughout the life-cycle as calculated by Eco-Invent