Can a federal plastic tax within the supply chain help reduce Canada's reliance on downstream plastic waste management? Can such a policy help advance the 12th Sustainable Development Goal: Ensure sustainable consumption and production patterns?

Canada's plastics economy is overwhelmingly linear and unsustainable, with 87 percent of plastic waste being landfilled or leaked into the environment, and only 9 percent being recycled (Deloitte & ECCC, 2019). Packaging and distribution account for nearly half of this waste, illustrating how current approaches fail to address the systemic overproduction of virgin plastics. To align with Sustainable Development Goal 12 (SDG 12), which calls for responsible production and consumption, Canada must move upstream. A federal plastics-intensity tax within the packaging and distribution sector would create the necessary market signal to reduce plastic use at the source.

Canada's current plastics policy framework remains reactive instead of proactive. The Single-Use Plastics Prohibition Regulations (2021) banned six consumer categories but left the broader packaging sector untouched. Even under the Integrated Management Approach to Plastic Products (ECCC, 2020), the focus remains on recycling despite evidence that the recycling rate has stagnated for decades. These policies create a gap and reproduce green consumerism by placing the burden on consumer choices rather than producers. In my essay, I will contrast current policies to produce an effective upstream solution while comparing past policies like the federal carbon tax.

Using evidence from abroad, I hope to prove its feasibility by showing the similarities produced with the United Kingdom's Plastic Packaging Tax (2022). Early evaluations indicate increased demand for recycled materials and rapid investment in sustainable domestic reprocessing (Dove et al., 2025). I hope to show how models promoting redesign could reduce mismanaged plastic waste by taking data from around the world.

Implementing a Canadian federal plastics-tax would align directly with SDG 12 in reducing non-renewable plastics to create a more sustainable approach to plastics production and consumption. The Federal Sustainable Development Strategy (2022–2026) already acknowledges these goals but lacks specific fiscal mechanisms to shift producer behavior. By embedding a plastics tax within Canada's existing environmental fiscal framework, the government could promote material innovation, enhance corporate accountability, and stimulate circular economy sectors, all while shifting plastic from being disposable to a usable resource.

Ultimately, my proposal reflects the institutionalist worldview by using federal governance and fiscal tools to steer the distribution and packaging industries towards markets towards sustainability. A federal plastics tax would therefore represent a pragmatic, evidence-based step beyond recycling rhetoric to address the roots of overproduction and support the shift toward a circular, low-waste economy consistent with Canada's commitments under the twelfth sustainable development goal.

Annotated Bibliography

Deloitte & Environment and Climate Change Canada. (2019). *Economic study of the Canadian plastics industry, markets and waste*. Government of Canada. https://epe.lac-bac.gc.ca/100/201/301/weekly_acquisitions_list-ef/2019/19-23/publications.gc.ca/collections/collection_2019/eccc/En4-366-1-2019-eng.pdf?nodisclaimer=1

This study offers a full life-cycle assessment of Canada's plastics economy. It reveals that 87% of plastic waste is landfilled or leaked into the environment, representing a $7.8 billion lost economic opportunity annually. Packaging is identified as the largest source of waste, as 47% of discarded plastics, while only 25% of all plastics are collected for diversion, and only 9% recycled. This relates to my policy by highlighting the need for plastics reduction not recycling the current production amounts.

Environment and Climate Change Canada. (2020). *Discussion paper: A proposed integrated management approach to plastic products*. Government of Canada. https://www.canada.ca/content/dam/eccc/documents/pdf/cepa/proposed-approach-plastic-management-eng.pdf

This federal discussion paper uses data found in the previous entry, "*Economic study of the Canadian plastics industry, markets and waste,"* and provides policy suggestions that can tackle the shortfalls that persist in the plastic industry. This highlights current policies as well as potential ideas, this will be helpful in comparing against my policy and what to improve.

Government of Canada. (2021). *Single-use plastics prohibition regulations: Regulatory impact analysis statement. Canada Gazette, Part I, 155*(52). https://gazette.gc.ca/rp-pr/p1/2021/2021-12-25/html/reg2-eng.html

This regulatory impact analysis statement was created alongside the federal regulations to ban six categories of single-use plastics, including checkout bags, cutlery, straws, stir sticks, six-pack rings, and cutlery made from problematic plastics. This analysis details the impacts of the consumer plastics ban on the categories which provide insights into consumer behaviour following reduction policies similar to my proposal.

Smart Prosperity Institute. (2019). *A vision for a circular economy for plastics in Canada*. University of Ottawa. https://institute.smartprosperity.ca/sites/default/files/report-circulareconomy-february14-final.pdf

This policy report describes Canada's current take-make-waste plastics model and proposes a national transition to a circular economy. It identifies five key barriers currently hindering circularity. This is beneficial to my proposal as it highlights what barriers to overcome while providing a clear picture of what to work towards as a solution to SDG 12 in Canada.

Dove, A., Lee, R., Farag, H., Macpherson, R., Krause, S., Elsdon-Baker, F., & Cavoski, A. (2025). Promoting the use of recycled plastics: a taxing issue. *Environmental Law Review*, *27*(1), 42-49. https://doi.org/10.1177/14614529251328783

This peer-reviewed article examines the legal and policy dimensions of using taxation to promote recycled plastic use, with a focus on the United Kingdom's Plastic Packaging Tax introduced in 2022. This paper will be beneficial in comparing similar policies and their uses.

Pottinger, A. S., Geyer, R., Biyani, N., Martinez, C. C., Nathan, N., Morse, M. R., Liu, C., Hu, S., de Bruyn, M., Boettiger, C., Baker, E., & McCauley, D. J. (2024). Pathways to reduce global plastic waste mismanagement and greenhouse gas emissions by 2050. *Science (New York, N.Y.)*, *386*(6726), 1168–1173. https://doi.org/10.1126/science.adr3837

This article presents a comprehensive modeling study that assesses strategies to curb plastic waste globally. It finds that enacting four systemic interventions reducing virgin plastic production, expanding recycling, substituting sustainable materials, and applying a modest fee on plastic packaging, could together reduce mismanaged plastic waste by approximately 91% and greenhouse gas emissions by one-third by 2050. This resource is another that can provide insights into what the impacts of my policy may be as well as acting as a guide on how to properly shape my policy.

Government of Canada. (2022). *Federal sustainable development strategy 2022–2026: Goal 12 – Responsible consumption and production*. https://www.canada.ca/en/environment-climate-change/services/climate-change/federal-sustainable-development-strategy/goals/responsible-consumption-production.html

This federal report outlines Canada's approach towards the twelfth sustainable development goal. It highlights national targets to reduce waste generation through prevention, reuse, and recycling while advancing a circular economy. By better understanding Canada's approach I can shape my own to fit in to the overall plan.

Environmental Defence Canada. (2020). *No time to waste: Six ways Canada can progress to zero plastic waste by 2025*. https://environmentaldefence.ca/report/no-time-to-waste/

This NGO report outlines six key strategies to help Canada achieve zero plastic waste by 2025 and continues to emphasize the urgency of transitioning away from the country's linear policies. The report proposes data transparency, bans on unnecessary single-use plastics, expanded deposit return programs, innovation for reuse systems, and the use of economic instruments like taxes on non-refillable containers to discourage single-use consumption. I can use these strategies to inform my own policy while using the examples to help differentiate my policy from the current ones to avoid overlap and creating more policy gaps.

Canada Plastics Pact. (2021). *Foundational research on Canadian plastics packaging flows.* Circular Materials Management Initiative. https://plasticspact.ca/wp-content/uploads/2025/05/CPP-Foundational-Research-on-Canadian-Plastics-Packaging-Flows-May-2021-final.pdf

This research report on plastic packaging flows across Canada's economy, highlighting its use in the transportation and shipping sectors more than the previous resources. The study quantifies the number of plastics used by category and identifies packaging used in transportation and logistics significant yet under-addressed waste source. This report reinforces the overall issue, highlighting the need to tackle this problem within the supply chain.