



Single-use plastics ban: Issues & challenges

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On June 10 of this year, Prime Minister Trudeau announced a ban on single-use plastics to come into effect as early as 2021. The list of banned items has not yet been determined but is expected to be like the European Union (EU) model. This ban intends to make plastic product manufacturers or companies using plastic packaging responsible for collection and recycling of plastic waste. The Government of Canada cited that about one-third of plastics used in Canada are for single-use or short-lived products and packaging, which includes up to 15 billion plastic bags used every year and close to 57 million straws used daily.

Ban in EU

In March, the European Parliament approved a ban on single-use plastic by 2021 (the Single-Use Plastics Directive). This ban puts more responsibility on plastic producers to clean up litter and for companies to include negative environmental impact statements on labels. The banned items include single-use plastic cutlery and plastic plates, plastic straws, plastic cotton swab sticks, plastic balloon sticks, oxo-degradable plastics and food containers, and expanded polystyrene cups. The directive also has recycling targets for collection and incorporation of recycled content.

Implications of the ban in Canada

The single-use plastic ban will certainly affect the plastics industry. In Canada, the plastics industry is big; there is about

\$35 billion in plastic resin and product sales, and it employs 93,000 people.

Is one solution to replace single-use packaging with reusable containers? Metro grocery chain announced that it will allow customers across Quebec to bring clean resealable plastic containers and bags for the purchase of fresh products. This raises some concern for potential food safety issues arising from the cleanliness of consumers' reusable containers.

Current state of plastics waste

The report "Economic Study of the Canadian Plastic Industry, Markets and Waste" was released by Environment and Climate Change Canada (ECCC). Findings from the report reveal that the main sector for plastic waste is packaging (43 per cent) with 87 per cent of plastic waste ending up in landfills or leaking into the environment. Only nine per cent of plastic waste is recycled (mechanical and chemical) and four per cent is incinerated with energy recovery.

Zero plastic waste

An ambitious 2030 zero plastic waste scenario has been developed in the ECCC study. This involves 90 per cent landfill diversion, an increase in mechanical and chemical recycling and energy from waste for remaining volumes and hard-to-recycle plastics. It is possible to achieve this goal with strategic interventions by government, industry stakeholders and the public at each stage of the plastic life cycle. Interventions include: creating viable, domestic, secondary end-markets; onboarding everyone to collect all plastics; supporting



and expanding all value-recovery options; increasing efficiency throughout the value chain; and extending plastic usage to reduce and delay waste generation.

Innovation

There are opportunities to innovate and create new products that will be environmentally friendly while also bringing convenience to the Canadian consumer. One novel solution is edible and biodegradable packaging made from renewable brown seaweed (Notpla). Packets of this material can be used in a variety of applications. They can contain water or drinks that can replace plastic cups and bottles for running events. Juices or alcohol cocktails in these packets can be fun at festivals or special events. Sauces, salad dressing and condiments can be packaged in this alternative material that can be composted with food waste.

Plastic waste is a global issue affecting wildlife and the environment. The Government of Canada is taking steps to reduce plastic waste, support innovation and promote affordable and safe alternatives. This will also include supporting the Canadian Council of Ministers of the Environment to implement the Strategy on Zero Plastic Waste action plan. 🍎

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