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Feature

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Addressing the crisis of food waste in Canada

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Categories

Food Waste reduction

Every year a whopping 35.5 million tonnes of food is lost or wasted along the entire food chain in Canada. However, 11.2 million tonnes of that food loss and waste is avoidable, and contains edible, surplus food that could be rescued.

Nationwide, that lost or wasted food is worth an extraordinary \$49.5 billion, representing 52 per cent of the money Canadians spend on food, and three per cent of GDP. The greenhouse gas (GHG) footprint of this loss is 56.5 million tonnes of CO₂ equivalent. Finding solutions for this avoidable food loss is vital, especially as four million Canadians, including 1.4 million children, can't readily access affordable food.

"The economic, environmental and social impact is huge and unsustainable," says Martin Gooch, CEO, Value Chain Management International (VCMi) in an interview. "Unless the waste and food industries take the lead and initiate change, governments will eventually force them to undertake mandatory actions."



Low tipping and landfill fees are partly responsible for the destruction of millions of tons of perfectly good food.

These findings are presented in [The Avoidable Crisis of Food Waste](#), a report released earlier this year by VCMI, a public and industry voice on food waste reduction, and Second Harvest, Canada's largest food rescue organization, with Walmart Foundation funding. It notes food loss and waste (FLW) is normal in Canada, and is accepted as a business cost by food growers, processors, manufacturers, hotels, restaurants and institutional providers.

"The root causes of the FLW that occurs in Canada include a culture of accepting waste," the report's technical annex says. "A direct correlation can be drawn between some business and governmental decisions and the creation of avoidable FLW. Other root causes of FLW include the true cost of FLW not being internalized by industry and consumers. In addition, there is no common template for redistributing food that would otherwise go to landfill or non-food use."

Specific causes include low tipping and landfill fees as well as conservative best-before dates that result in the disposal of safe, edible food; demand for aesthetically perfect food; the expectation of 100 per cent on-shelf availability and food industry reluctance to donate useable surplus food. "FLW is an indication of inefficiency that drives up costs and lowers productivity, leading to higher prices," the report notes.

"The food industry is highly competitive and landfill is easy and the fees are cheap," says Gooch. "By and large, when businesses look at food costs they don't factor in disposal costs, because the financial reporting systems don't connect to it. Disposal is seen as a budget item not a strategic opportunity."

"We can't afford to keep doing what we're currently doing. We need to compete on added value not just cost." – Martin Gooch

Waste management practices

The report notes numerous reasons for wasteful decision make. First, it's too cheap and easy to send food waste to landfills. Low tipping fees make other options economically unviable for food producers.

Waste management companies bear some of the responsibility as well. "Waste management is big business and profitable, partly because organic waste is heavy and therefore expensive to transport," the report says.

Lack of access to industrial green bin programs is another roadblock. Respondents to the research study says that lack of access prevented them from taking a more responsible approach to managing the organic waste stream.

"Widespread change would have to take place in a very structured manner," Gooch says. "If we increase tipping fees we need to communicate to industry organizations, 'here is what you can do about it and here is where you get help'. [We need to] help the waste

management industry develop new business models and develop new technology, such as dehydrators. Tipping fees are outside the haulers' control and they're facing competitive issues. They're all subject to the same environment, but if they lease a dehydrator, the tipping fees decrease and they're send less waste to landfill. The leased dehydrator provides income and they are adding value for the customer."

Waking up to value

While the report notes that food waste is viewed by some in the food industry as beneficial because it supports sales, others are realizing that food waste reduction is socially and environmentally responsible and that it can also reduce costs and add value.

"Waste that's not used beneficially is a lost opportunity for revenue and carries a disposal cost, so we use as much as we possibly can," says Paul Lansbergen, president of the Fisheries Council of Canada, which represents companies that harvest and process fish and seafood.

Other food producers are increasingly sensitive to the issue, and are being pushed by the problem of recalls to ensure they have complete end-to-end supply chain visibility on their product. Heavy hitters like Unilever, Nestle, Tyson and Dole, are beginning to use blockchain technology to track food from source to store. In reaction to the romaine lettuce e-coli scare which resulted in the destruction of tonnes of the leafy greens late last year, Walmart has introduced a compliance initiative requiring its suppliers to use blockchain tracking. These initiatives will help to reduce food waste by creating a more efficient, faster and transparent food supply chain.

Farther down the chain, foodservice businesses also feel the pinch from wasteful practices. With margins hovering about the four per cent mark, "Food waste is always top of mind for foodservice operators because ultimately, it affects our bottom line," says Roberto Sarjoo, director of marketing and communications for industry association Restaurants Canada. "Our Q3 2018 Restaurant Outlook Survey showed eight out of 10 Canadian foodservice businesses are well aware of how environmental sustainability is becoming a necessity for profitability."

The role of government

No single level of government has responsibility or accountability for food waste. This leads to a maze of overlapping policies, legislation and regulations that corporations have to figure out for themselves. There are no national policies, regulations or legislation regarding landfill regulations and tipping fees.

“An example of a lack of consistency, just at the municipal level, includes that the organic tipping fees of neighbouring municipalities can differ by hundreds of dollars per tonne. That provincial or territorial jurisdictions jointly govern landfill regulations and waste management infrastructure means achieving change can take years and rests on the lowest common denominator,” the report notes.

Likewise there are no standardized policies or regulations governing the emissions created from the processing and disposal of food. And, there is no linkage between “landfill regulations and tipping fees to investment of public funds in the knowledge, skills and infrastructure required to reduce FLW through prevention, redistribution, recycling and reuse.” This gap occurs because it would require cooperation between different levels of government and different departments.

Emterra Group, based in Burlington, Ont. provides recycling resource management and waste disposal solutions nationwide. They collect organics for every municipality in which they operate. The municipal, residential, institutional and commercial split varies widely with peak demand in areas that have banned all organics from landfills and in locations that don’t receive organics collection as part of their municipal collection program.

“Our organics fees vary municipality-to-municipality depending on which organics processing facilities the materials go to,” says Paulina Leung, vice-president, corporate strategy and business development, Emterra Group. “Food waste collection and processing is very different across Canada. There is no cookie-cutter response. If there were provincial policies on food waste recovery, more could be done to divert these valuable materials from the landfill.”

The governmental toolbox

At the municipal level, numerous jurisdictions across the country are taking action. But while increasing collection of organics helps to divert it from landfill, and reduces the carbon footprint, municipalities are learning that they also have to educate citizens about what is waste and what is not.

To that end, the National Zero Waste Council was founded in 2013 uniting Metro Vancouver and Canada’s six largest metro regions. Part of that initiative is “Love Food Hate Waste Canada”, which aims to prevent residential food waste at the source. In the United Kingdom, where the program originated, it reduced avoidable household food waste by 21 per cent in the first five years. Metro Vancouver also has an aggressive “Food Isn’t Garbage” campaign with tips and resources for residents and businesses and continues to improve its disposal ban inspection and enforcement.

In January 2015, Metro Vancouver implemented an organics disposal ban to divert 80 per cent of total waste from landfill by 2020 and encourage residents and businesses to separate food waste from garbage. “We concluded a ban combined with education would be the most effective method for encouraging waste diversion. Simply increasing tipping fees has the potential of unintended consequences and is not as direct a tool as a disposal ban,” says Paul Henderson, general manager of solid waste services at Metro Vancouver. “While there is still much room for improvement, the organics disposal ban has increased the amount of organics diverted from disposal and increased the implementation of food waste collection programs.”

The government of Quebec is unveiling an updated strategy on organics, which is expected to ultimately include a disposal ban. The province has also invested more than \$550 million in 12 composting and anaerobic digestion facilities that will start up before December 31, 2022.

“Funding programs, incentives, information and support are part of the strategy we use to increase the recovery and recycling of organics as a basis for a disposal ban implementation,” says Sophie Langlois-Blouin, vice-president of operations at the government’s oversight body, Recyc-Quebec.

Currently, 474 of the 1,108 municipalities in Quebec collect residential and some small-business organics. However, organic material represents more than 40 per cent of the five million tonnes of residual materials that are landfilled or incinerated annually.

Toronto has been diverting organic waste through its Green Bin program since 2002, but hasn’t considered a ban on organics in landfill. “We rely on financial incentives to divert waste from landfill because it’s expensive space with a finite capacity and identifying new landfill sites is a massive challenge,” says Matt Keliher, Toronto’s general manager of solid waste management services.

Where to from here

Resolving the issue of Canada’s food loss and waste is not a short-term project. The Avoidable Crisis of Food Waste sets out a matrix and timeline for actions by industry, industry organizations and government that start now and extend beyond 2022. They propose prevention at source, redistribution of excess food all along the food supply chain, and remediation of waste management practices.

Industry is encouraged to immediately identify solutions to divert FLW from landfill; engage employees; and, work to find ways to transform otherwise inedible FLW into edible products. Governments are exhorted to review reuse and recycling infrastructure needs

alongside cost-benefit analysis; identify best practices in redistribution; highlight gaps in infrastructure that impede reuse and recycling; and increase funding for development of solutions that will transform otherwise wasted food into edible products.

“Change isn’t easy,” Gooch says. “We can’t afford to keep doing what we’re currently doing. We need to compete on added value not just cost. We need industry to take the lead if they don’t want government telling them what to do and forcing them to do it. Banning food waste would make a huge difference, but we think it would create too many issues for the industry. You need to take the time to develop the infrastructure and systems. And figure out what you’ll do with the products such as bioenergy. If you don’t change, you’re going to be a dinosaur that’s left behind wondering what happened.”

Ultimately, the reduction of food waste represents an opportunity to not only do something that is sustainable and socially responsible, it also comes down to the bottom line. The report concludes: “Reducing FLW...represents an opportunity for businesses along the entire food chain to improve their financial performance and competitiveness. These opportunities arise from cost reduction, competitive positioning and resource efficiency; thus, providing businesses an opportunity to improve performance in all three pillars of sustainability – environment, economy and society.” 🌱

Food loss vs Food waste explained

Food Loss: Discarding of edible and inedible commodities and foods during the production, processing and manufacturing of food or beverages for human consumption prior to their distribution and sale in retail or foodservice. Includes commodities used in the production of beverages. Examples include barley used in the production of beer and spirits, grapes used in the production of wine, carrots used in the production of fruit juice.

Food Waste: Discarding of edible foods and beverages (and inedible parts) during distribution retail, foodservice, households and during redistribution. Includes beverages, unless explicitly stated otherwise.