



STUDY OF ORGANIC WASTE REDUCTION:

**Tax Incentive Options for Charitable Food Donations
Making the Business Case**



Prepared by The Conference Board of Canada

About the National Zero Waste Council

The National Zero Waste Council is a cross-sector leadership initiative bringing together governments, businesses, and non-government organizations to advance a national waste prevention and reduction agenda in Canada. With a focus on influencing behaviour and improving product design and packaging, the National Zero Waste Council aims to unite efforts in waste prevention and drive a fundamental shift in our relationship with waste.

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Prepared by The Conference Board of Canada

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EXECUTIVE SUMMARY

Avoidable organic waste leads to undue costs for local governments including infrastructure costs to manage waste, along with associated environmental costs of pollution monitoring. Such costs could be put to better public use for the benefit of businesses, families, and communities. Food is a significant part of organic waste: a recent study calculated that the annual value of food waste in Canada is \$31 billion.¹ Metro Vancouver looked at food waste statistics from various municipalities across Canada and estimated an overall national figure of 169,400 tonnes of edible food that is disposed of annually.² This represents a huge amount of food, effort and expense that is literally going to waste. Providing compelling incentives to the ICI (industrial/commercial/institutional) sector to donate edible food is a progressive approach to edible food disposal reduction and management. A tax incentive strategy is one potential means of encouraging business to donate rather than dispose of edible food.

This report examines the business case for using a tax incentive strategy to increase the diversion of organic waste by incenting businesses to increase their donations of edible food. It is based on the premise that in food supply chains there is always a quantity of healthy, nutritious food that results from oversupply, food that is misshapen and thus hard to sell, and food beyond its 'best before' date. The expected results—increased food donations and less organic material entering the waste stream—would give rise to economic, environmental, and social returns.

This report employs a brief literature review and interviews with stakeholders to inform the business case analysis. It outlines the strengths and weaknesses of various tax incentive options and presents complementary strategies that could add value to a tax incentive strategy that focuses on reducing organic waste through increased food donations.

Definition of Edible Food

Before setting out the parameters of a new tax or other kind of incentive, 'edible food' needs to be defined. No incentive should be offered for food waste, which consists of food losses, inedible parts or food spoilage. Incentives should only be directed toward donations of edible food: defined as good quality, healthy, nutritious food. Food still in perfect condition can be unsuitable for sale where commercial standards are not met. It remains safe and is a healthy choice for human consumption. This includes food that is safe to eat beyond its "best before" date. The 'best before' date does not indicate a food is unsafe to eat, but rather that its quality, freshness, taste or nutritional value may be less than ideal.³

1 Gooch, Martin and Abdel Felfel, "27 Billion" Revisited, 10. This figure includes all types of waste stemming from food production, some of which is destined for human consumption channels, some for animal feed sources, and some for landfills, composting, and bio-digestion.

2 Metro Vancouver, Unpublished data.

3 Canadian Food Inspection Agency, *Date Labelling on Pre-packaged Foods* (web site)

Benefits of Diverting Food from Waste Streams

Prior to deciding on whether to offer a tax incentive for food donations, governments want to know how it could benefit the economy, the environment, and society. Motivations for governments to support efforts to reduce organic waste through diversion of edible food include a greater ability to reduce communities' environmental footprints; economic gains; and enhanced household food security.

Businesses will be more likely to change behaviour to divert more edible food from disposal and increase their community food donations, if they are suitably motivated and provided with effective, easy-to-adopt options for action. Key motivations for business include financial rewards; relationship building and partnerships; and corporate social responsibility.

Tax Incentive Options

To be effective in motivating businesses to donate food, a new incentive must be compelling enough to change existing behaviour. A tax incentive should aim to decrease edible food disposal and increase edible food donations. There are a number of ways to structure such an incentive, including linking it to food donations, the costs of disposal or donation, or other means.

There are several possibilities for linking tax incentives to actual food donations. One approach is to base the tax incentive on the measure or value of edible food being donated. A food donation could be measured by its cost, fair market value, weight, volume, or other method.

Another approach to creating a new tax incentive is to link the incentive with a desirable business behaviour. Some examples of tax incentive options include linking a tax incentive with:

1. The cost of manufactured goods/food – The simplicity of this approach, in that it relies on only one measure of food donation (i.e., fair market value), is appealing to stakeholders.
2. The amount of food donated – Matching the amount of benefit to the donated food volume or weight would encourage food donors to maximize their donations.
3. The frequency of food donations made – This approach would aim to increase the overall amount of edible food being diverted from waste streams through a higher frequency of food donation.
4. The transportation costs associated with making a food donation – This incentive would lower a barrier to food donation by offsetting a real business cost.
5. Business waste disposal costs – This incentive would lower a barrier to food donation by offsetting a real business cost.

Examples of complementary strategies to tax incentives for augmenting commercial food donations include education; centralized warehouse facilities; third-party certification; and other government efforts.

Next Steps

Next steps in taking action to incent businesses to change their behaviour could include some or all of the following:

- Conduct new research on where and how a new tax incentive would fit into the existing Canadian taxation system.
- Consider international models in this area for ideas on how to encourage businesses to donate edible food.
- In other jurisdictions where tax incentives for food donations are already available, look at whether the amount of organic waste was reduced in those regions to strengthen arguments for a new tax incentive in Canada.
- Encourage commercial food waste disposal bans or limitations in municipalities/regions across Canada to encourage businesses to consider alternatives for disposing of edible food.⁴

- Conduct discussions, surveys or workshops with businesses, community organizations and governments to examine together the challenges of redirecting edible food and potential solutions, and then establish collaborative frameworks for action.
- Look at other ways to reduce waste associated with food, such as packaging that could be reduced in weight or volume, and recycling of packaging materials.

Finding ways to incent businesses to divert more organic material from waste streams through edible food donation is an ambitious but commendable aspiration. They have great potential for producing economic, environmental, and social benefits. Chapter 1 – Introduction

⁴ This approach is also recommended in Uzea, Gooch and Sparling, *Developing an Industry*, 23.

CHAPTER 1 ■ INTRODUCTION

Finding ways to minimize our collective food-related environmental footprint is important for corporate and private citizens alike. Reducing and managing the amount of organic materials that enter our waste streams is a key objective in this pursuit which also contributes to economic efficiency and sustainability by making best use of resources. Avoidable organic waste leads to undue costs for local governments including infrastructure costs to manage waste, along with associated environmental costs of pollution monitoring. Money spent for these purposes could be put to better public use for the benefit of businesses, families, and communities. Many Canadian regions and municipalities are already taking action to manage organic waste. Examples include:

Metro Vancouver – This federation of 23 local governments consciously places a sustainability lens on all of its activities. To that end, Metro Vancouver has banned organic materials (including food) from waste disposal facilities.⁵

Prince Edward Island – The province’s Waste Watch program requires businesses across the province to arrange and pay to transport and dispose of organic materials at disposal centres.⁶

Regional District of Nanaimo – The region’s Organics Diversion Strategy focuses on diverting both commercial and residential food waste. The commercial food waste diversion program began in June 2005 with the banning of commercial food waste from the Regional Landfill.⁷

While Canadian jurisdictions vary in their approaches to waste reduction and management, there is widespread agreement that there is more to learn and do.

Food is a significant part of organic waste: a recent study has quantified the value of food waste in Canada to be \$31 billion annually.⁸ In Canada, almost half of all food waste comes from consumers while the other half stems from the rest of the food value chain.⁹ Solid waste studies conducted by municipalities and regional districts across Canada have estimated the proportion of edible food that is currently entering our waste streams. A recent study by Metro Vancouver examined the volume and composition of waste stemming from local food businesses, including grocery stores, commercial food venues such as restaurants and coffee shops, wholesale food, and food manufacturing. Using a model, the annual amount of edible food that was disposed of was estimated to be 13,051 tonnes, or about 10.5 per cent of total food waste in the ICI (industrial/commercial/institutional) sector.¹⁰ A subsequent study by Metro Vancouver looked at food waste statistics from various municipalities across Canada and estimated an overall national figure of 169,400 tonnes of edible food that is disposed of annually.¹¹ These figures represent a significant amount of edible food as well as effort and expense that is going to waste.

There are a number of ways to reduce edible food disposal, especially in larger municipalities, and along the supply chain. One approach is to divert edible food from entering the waste streams to charitable community organizations. From there, edible food can then be distributed locally to

5 Metro Vancouver, *Organics Disposal Ban*.

6 Island Waste Management Corporation, *About Us*.

7 Regional District of Nanaimo, *Organics Diversion Strategy*.

8 Gooch, Martin and Abdel Felfel, “27 Billion” Revisited, 10. This figure includes all types of waste stemming from food production, some of which is destined for human consumption channels, some for animal feed sources, and some for landfills, composting, and bio-digestion.

9 Gooch and Felfel, “27 Billion” Revisited, 32.

10 Metro Vancouver, Unpublished data.

11 Ibid.

the food insecure.¹² Individuals and families experiencing food insecurity often turn to charitable community organizations and their food distribution outlets, such as food banks, soup kitchens, and good food boxes. However, these organizations and programs rely heavily on donations of food, and often do not have enough food to meet the full nutritional needs of their clients. Increasing the amount of quality food donations to charitable community organizations would improve food security in local community households. The key here is to provide compelling incentives to businesses to donate their edible food.

While efforts to reduce and manage the amount of edible food going to waste in all quarters are underway, more can and should be done. Diverting more edible food from waste streams would yield three main types of benefits: economic; environmental; and societal.

1. **Economic Benefits** – Reducing the amount of food that is wasted benefits businesses all along the supply chain. Improved efficiencies that lead to less edible food entering the waste streams will lower food production, storage and disposal costs.¹³ Governments also benefit through reduced waste management and oversight costs and through longer-term impacts including improved environmental sustainability and increased, improved, or enhanced household food security.
2. **Environmental Benefits** – Many municipalities have set targets for reducing waste. The resulting benefits of less leachate and greenhouse gases include improved land, air, and water quality. Further, energy and resource efficiencies will be gained when food that is grown and produced is consumed rather than disposed of.¹⁴
3. **Societal Benefits** – Society will benefit from an increase in donated edible food which will result in increased, improved, or enhanced household food security in communities.

A number of potential public policy options could help reduce edible waste disposal and increase edible food donations. Tools available to governments at all levels include, for instance, regulatory measures to mandate behaviour, subsidies such as tax incentives or cash programs for infrastructure improvements, and other tax policies. This report focuses on the business case for a tax incentive strategy aimed at the ICI sector.

¹² *Food insecurity* refers to a state where nutritious food is unavailable or inaccessible or where the supply is unstable. A more detailed discussion of food security issues in Canada is provided in Chapter 2.

¹³ Interview findings.

¹⁴ *Ibid.*

Purpose of Report

This report examines the business case for using a tax incentive strategy to increase the diversion of organic waste by incenting businesses to increase their donations of edible food. It is based on the premise that in food supply chains there is always a quantity of healthy, nutritious food that results from oversupply, food that is misshapen and thus unable to be sold, and food beyond its ‘best before’ date. The expected results—increased food donations and less organic material entering waste streams—will give rise to economic, environmental, and social returns.

This report employs a brief literature review and interviews with stakeholders to inform the business case analysis. It outlines the strengths and weaknesses of various tax incentive options and provides recommendations for complementary strategies that could add value to a tax incentive strategy that focuses on reducing organic waste through increased food donations.

Framing the Analysis

In framing the analysis of how to incent businesses to donate edible food by a tax incentive, several questions were considered:

1. What kinds of tax incentive would motivate businesses to increase their efforts or change their behaviour regarding food donations?
2. Would a new tax incentive present any challenges for food donor businesses or food receiving agencies?
3. What opportunities exist to further encourage businesses to donate edible food?
4. What are the potential impacts of diverting edible food supply from municipal waste streams?
5. How could these impacts be measured and tracked?

In considering these questions, four issues were identified as requiring further examination.

1. Definition of Edible Food

Before setting out the parameters of a new tax or other kind of incentive, ‘edible food’ needs to be defined. No incentive should be offered for food waste, which consists of food losses, inedible parts or food spoilage. Incentives should only be directed toward donations of edible food: defined as good quality, healthy, nutritious food. Food still in perfect condition can be unsuitable for sale where commercial standards are not met. It remains safe and is a healthy choice for human consumption. This includes food that is safe to eat beyond its “best before” date. The ‘best before’ date does not indicate a food is unsafe to eat, but rather that its quality, freshness, taste or nutritional value may be less than ideal.¹⁵

¹⁵ Canadian Food Inspection Agency, *Date Labelling*.

The first priority for businesses, in terms of managing unsaleable product, is to reduce waste along the supply chain. There is an established hierarchy of food recovery and use after waste is reduced at the source: human consumption, animal consumption, raw material for other industries, and then entry into the waste streams, such as landfilling, fertilizer/compost and incineration.¹⁶ There are many reasons why otherwise good quality food is discarded before it can be made available for human consumption. For instance, at the producer level, some food products may be rejected because their colour, size, shape or other characteristics do not fit with specified orders or established quota agreements. These are elements that do not affect taste or nutritional value.¹⁷ At the manufacturing level, errors in labelling, smaller quantities that do not meet bulk unit orders; or approaching “best before” dates result in edible food being discarded. These foods, which are removed from the selling lines, could be diverted from waste streams for human consumption in many cases.

2. Creating a Compelling Incentive

To be effective in motivating businesses to donate food, a new incentive must be compelling enough to change existing behaviour. A tax incentive should aim to decrease edible food disposal and increase edible food donations. Food businesses, ranging from manufacturers to distributors, to wholesalers, retailers and food services, face added cost when left with excess food production that they cannot sell. In other words, disposing of edible food results in costs for businesses. Creating an incentive that offsets food disposal costs represents one potential avenue for action. Specific business costs, such as those related to manufacturing, labour, or transportation also present opportunities to incent change through a new tax incentive.

Tax incentives have been applied in other jurisdictions to encourage corporate food donations, but in different ways. In France, for instance, companies can take advantage

of a tax break of 60 per cent of the donation and which may be carried over for five years.¹⁸ In Spain, food donors are offered a corporate tax credit amounting to 35 per cent of the net book value of the donated food.¹⁹ In the U.S., the contribution benefit for the food donor business is equal to the cost of goods of donated items, plus one-half the unrealized appreciation, not in excess of twice the cost of goods. The benefit is limited to 10 per cent of the company’s taxable income, although an increase to 15 per cent has been proposed.²⁰ It is not yet clear what type and how large the incentive would need to be to influence the food donation practices of businesses in a Canadian context.

3. Addressing Challenges

Many food businesses, including processors, retailers, restaurants, and others, already donate edible food to community organizations. For example, Clover Leaf Seafoods Inc., Janes Family Foods Ltd., Kraft Canada Inc., Maple Leaf Foods Inc., McCain Foods (Canada), Olymel, Saputo Dairy Products Canada, and Weston Bakeries Ltd. are among the major manufacturers and processors that donate food.²¹

16 U.S. Environmental Protection Agency, *Putting Surplus Food*.

17 Interview findings.

18 BIO by Deloitte, *Comparative Study*, 30.

19 Ibid., 40.

20 Committee on Ways and Means, *Fighting Hunger*, 6.

21 Second Harvest, *Food Donors*.

Highland Farms, Loblaw Companies Ltd., Longo Brothers Fruit Markets Inc., Metro Inc., and Sobeys Inc. are some of the many retailers that already donate food through community channels.²² In addition, there is a wide variety of food distributors and brokers (e.g., ConAgra Foods Canada Inc., SunOpta Canadian Food Distribution Group, Sysco Canada), wholesalers and storage facilities, food service and hospitality, and other organizations currently involved in food donation across Canada.²³ Food donors have a wide range of recipient organization types to choose from in local communities. These include food banks, homeless shelters, school meal and snack programs, crisis shelters for women and children, soup kitchens, emergency food pantries, and food rescue organizations, among others. Any new incentive to encourage higher levels of donations must fit into the existing food donation landscape.

The goal of diverting higher volumes of food from waste streams to human consumption channels is an ambitious one. In making the business case for a new tax incentive, it is important to recognize potential challenges to its uptake and effectiveness in achieving its goal. The Food Waste Reduction Alliance recently conducted a national study in the U.S. that identified the major barriers that prevent companies from donating more unsaleable food.²⁴ The key concerns are summarized in Table 1.

Table 1 Barriers that Prevent U.S. Corporate Food Donations, By Frequency of Citation

Type of Barrier	Manufacturing	Retail and Wholesale
Transportation constraints	63%	42%
Liability concerns	50%	67%
Insufficient storage & refrigeration at food banks	50%	50%
Regulatory constraints	50%	17%
Insufficient on-site storage & refrigeration	38%	33%

Source: Food Waste Reduction Alliance.

In some cases, the barrier is a perceived one that can be overcome through education and awareness raising. For instance, some businesses in Canada fear that donating food would leave them open to liability and risk issues.²⁵ Perceived liability risks have also been reported as a major barrier to food donation in the U.S. as well as in the E.U.²⁶ Canadian businesses may be unaware of the provincial and territorial legislation that protects food donors and distributors who act in good faith. For example, the *Donation of Food Act* in Ontario states that:

22 Second Harvest, *Food Donors*, and interview findings.

23 Ibid

24 Food Waste Reduction Alliance, *Best Practices*, 13.

25 Uzea, Gooch and Sparling, *Developing an Industry*, 22; Interview findings.

26 Food Waste Reduction Alliance, *Best Practices*, 13; BIO by Deloitte, *Comparative Study*, 16.

A person who donates food or who distributes donated food to another person is not liable for damages resulting from injuries or death caused by the consumption of the food unless,

(a) the food was adulterated, rotten or otherwise unfit for human consumption; and

(b) in donating or distributing the food, the person intended to injure or to cause the death of the recipient of the food or acted with reckless disregard for the safety of others.²⁷

The early stages of offering a new business tax incentive would see a transition period where food donor businesses and food receiving agencies alter their structure and practices. This period would see changes in associated infrastructure and coordination to allow both sides of the food donation relationship to maximize their opportunities. For example, fresh foods, due to their short shelf life, need special handling and conditions. An increase in the volume of fresh food donations would lead food receiving agencies that do not already have cold-chain storage capacity to seek out new partnerships or augment their financial supports so that they could acquire or improve their infrastructure. Coordination of effort would be needed for the goal of increasing food donations to be realized in a significant way.

On the business side, a lack of coordination leads to an inconsistent approach to food donations, sometimes even within the same retail chain. Some chains do not have a broad coordinated program of food donation, but instead allow the individual stores to make decisions in this area.²⁸ The lack of a consistent approach by donors forces recipient organizations to seek out local retailers and other food businesses in their communities and solicit donations on an individual basis. Once again, improved coordination would be called for to handle increased donations.

27 Government of Ontario, *Donation of Food Act*, 1994 S.O. 1994, CHAPTER 19.

28 Interview findings.

4. Measuring Impacts

The success of a new tax incentive will be measured by its ability to effect change in the directions intended. In the case of a tax incentive to encourage businesses to donate edible food rather than dispose of it, measured reductions in organic waste and increases in donated food will be the primary indicators of effectiveness. Identifying indicators for both organic waste reductions and donated food increases will be important for reporting on links between the two. If only the amount of food donations is measured, for instance, it will be difficult to attribute the outcome to concurrent organic waste reductions. Establishing a causal link between the two goals will be challenging but important to pursue in determining the environmental and economic impacts of a new tax incentive.

A longer-term measure of the impact of the initiative is whether and by how much household food security has been increased, improved, or enhanced. Food insecurity in Canada ranges from “the fear of not being able to provide or obtain food, to hunger due to food shortages.”²⁹ Data from 2012 indicates that 4 million individuals in Canada—nearly 13 per cent of Canadian households—are food insecure on some level. This number includes over one million children.³⁰ Some analysis of the increase in food donations in communities and evidence of increased, improved, or enhanced food security in those same communities would help to demonstrate the positive social impacts of the new tax incentive.

29 Willows and others, *Associations Between Household Food Insecurity*.

30 Tarasuk, Mitchell, and Dachner, *Household Food Insecurity*, 8.

Methodology

The following research activities were undertaken to examine the business case for reducing organic waste by increasing food donations through a tax incentive strategy:

1. Literature and Documentation Review

A literature and documentation review was conducted in order to better understand the context of organic waste as part of municipal waste streams. More specifically, data on the amount of edible food supplies that constitute organic waste in major municipalities was sought. Waste studies and municipal waste audits underway or recently completed in key municipalities and regional districts across Canada were analyzed as part of this review. In addition, information on the potential impacts of diverting edible food supplies from waste streams and into human consumption channels as a means of increasing, improving, or enhancing food security were also examined. Details on the environmental benefits of decreasing municipal organic waste and the health benefits of increasing, improving, or enhancing food security were of particular interest.

Further, specific fiscal incentives for businesses and governments to facilitate enhanced donations of edible food supplies to community charitable organizations were explored. Insights on these and other incentives for diverting edible food supplies from municipal waste streams to human consumption channels were key to this investigation.

The literature and documentation review was used to inform the design of the key informant interviews and of this report of findings.

2. Key Informant Interviews

A series of 14 telephone interviews with key informants was conducted to inform the analysis of edible food supplies that constitute organic waste in major municipalities and to identify and explore the challenges and benefits of reducing organic waste. The interviews focused on how to divert edible food supplies from municipal waste streams and how to facilitate enhanced donations of edible food supplies to community charitable organizations. The interviews supplemented the literature and documentation review and provided additional perspectives and expert opinions and advice. Interviews followed a semi-structured format and were conducted in both English and French, as required.

3. Report of Findings

A report of findings was drafted and submitted to external experts and to the Food Working Group of the National Zero Waste Council for review. The feedback received was addressed and incorporated into the final report of findings as appropriate.

Organization of Report

Chapter 2 identifies potential benefits to governments and businesses of food donation. Chapters 3 and 4 present a range of tax and non-tax incentive options for encouraging ICI businesses to donate their edible food rather than dispose of it. Finally, Chapter 5 discusses next steps and suggestions for further research.

CHAPTER 2 ■ BENEFITS OF DIVERTING FOOD FROM WASTE STREAMS

Prior to deciding on whether to offer a tax incentive for food donations, governments want to know how it could benefit the economy, the environment, and society. Motivations for governments to support efforts to reduce organic waste through diversion of edible food include a greater ability to reduce communities' environmental footprints; economic gains; and enhanced household food security.

Businesses will be more likely to change behaviour to divert more edible food from disposal and increase their community food donations, if they are suitably motivated and provided with effective, easy-to-adopt options for action. Key motivations for business include financial rewards; relationship building and partnerships; and corporate social responsibility.

Benefits to Governments

Economic Gains

Maintaining and managing disposal capacity in Canadian municipalities is becoming increasingly costly due to “land availability, regulatory requirements, the need to capture landfill gas, and other factors.”³¹ Efforts to reduce waste generation and disposal can negate or soften such costs.

Reducing the amount of organic materials entering the waste streams allows municipalities to realize economic savings. The following operational benefits of reduced organic materials can be expected by municipalities³²:

- Fewer greenhouse gas emissions, reduced odour and nuisance effects because less biodegradable material will be landfilled;
- Potential increase in service life of leachate collection systems;
- Smaller total and differential settlement of the waste mass, which facilitates final cover construction and after-use implementation;
- Possible closures of landfill tipping faces;
- More stable landfill sites, as they will contain less biodegradable material;
- Landfill life extensions as less airspace will be consumed.

These operational benefits will result in lowered costs for municipal waste management in the areas specified. Reducing waste management expenses will allow municipalities to spend a larger proportion of public funds on social services and other important community development initiatives.

³¹ Fraser, *Choosing Our Future*, 7.

³² Adapted from City of Winnipeg, *Comprehensive Integrated Waste Management Plan*, 143-144.

Reducing Environmental Footprint

The general benefits to the environment of reducing the amount of organic materials entering the waste streams are well documented. What have not been clearly identified until recently are estimates for specific environmental benefits. Metro Vancouver has studied the environmental benefits, specifically relating to land, air, and water, of preventing edible food from entering the waste streams on a national basis. Based on its recent study of the volume and composition of waste, it was estimated that more than 169,000 tonnes of edible food could have been diverted annually from the ICI solid waste stream toward food donations in Canada.³³ At the same time, the national environmental impacts of diverting this volume of food could be as much as:

- 119,041,983 Kg of avoidable greenhouse gas emissions (i.e., carbon dioxide equivalents or CO₂e);
- 38,115,110 Kg of avoidable water quality impacts (i.e., biological oxygen demand or BOD₅s);
- 338,801 landfill airspace occupied (i.e., measured in cubic meters or m³).³⁴

As part of its waste management plan, the City of Winnipeg has estimated the environmental impacts of new efforts to reduce organic materials entering its waste streams. The longer term (i.e., 20-year) estimates indicate that in 2031, from 8,600 to 10,500 tonnes of organic materials could be diverted from disposal.³⁵ The City of Halifax estimates that between 1,725 to 2,043 tonnes of food that is annually destined for waste within its jurisdiction is edible food that could be diverted for human consumption.³⁶

Other jurisdictions are also exploring and measuring the environmental benefits of diverting food from waste streams: one study estimates that the amount of avoidable food waste in the U.S. is 55.41 MMT (million metric tonnes)/year for 2009, or 28.7 per cent of total annual production (by weight).³⁷ This volume had a total retail value of \$197.7 billion.³⁸ The avoidable food waste gives rise to 113 MMT of CO₂e (carbon dioxide equivalents) annually from its production, transportation, and disposal.³⁹ This analysis recognizes that the disposal of edible food represents multiple costs for businesses—including the costs to produce the food in the first place, deliver the food to its various destinations, and the actual disposal fees.

Efforts, then, to enhance reductions in the disposal of organic materials in major municipalities are expected to have positive environmental outcomes. By diverting organic materials from waste streams, greenhouse gas emissions will be reduced while water and air quality will be better preserved. These positive outcomes will have longer-reaching impacts on environmental sustainability and human health as well as municipal waste management abilities.

33 Metro Vancouver, Unpublished data.

34 Ibid.

35 City of Winnipeg, *Comprehensive Integrated Waste Management Plan*, 138.

36 MacDonald, *Food Waste Diversion*, 13-14.

37 Venkat, "The Climate Change", 437.

38 Ibid., 441.

39 Ibid., 439.

Increasing, Improving, or Enhancing Household Food Security

Food security is a continuum, with households classified as either food secure or marginally, moderately, or severely food insecure. Table 2 indicates the distribution of food secure and food insecure households in Canada while Table 3 shows the breakdown of household food insecurity in Canada. Recent estimates are that approximately 1.7 million (12.6 per cent) Canadian households experience some degree of food insecurity. This total includes just over half a million households that are marginally food insecure, over 780,000 that are moderately food insecure, and just over one third of a million households that are severely food insecure.

Table 2 Prevalence of Household Food Security and Insecurity in Canada (2012)

Level of Household Food Security/Insecurity	Total (000s)	Percentage
Total Households	13,201.9	100
Food secure - No report of income-related problems of food access.	11,535.5	87.4
Food insecure - Ranges from “the fear of not being able to provide or obtain food, to hunger due to food shortages.”	1,666.5	12.6

Source: PROOF.

Table 3 Breakdown of Household Food Insecurity in Canada (2012)

Breakdown of Food Insecure Households	Total (000s)	Percentage
Marginally food insecure - Some indication of worry or an income-related barrier to adequate, secure food access.	543.7	4.1
Moderately food insecure - Compromise in quality and/or quantity of food consumed by adults and/or children due to a lack of money for food.	786.1	6.0
Severely food insecure - Disrupted eating patterns and reduced food intake among adults and/or children.	336.7	2.6

Source: PROOF.

Current efforts to improve household food security in Canada include federal, provincial and territorial programs that provide funding support or tax credits; community-based approaches that provide emergency food supplies to people in need; education on healthy eating; community-building environments; and spaces for growing and harvesting healthy foods (e.g., community gardens and kitchens).⁴¹ Efforts to improve food security vary according to location, size of need, cultural food needs, and resources available. Many programs rely heavily on donations of nutritious foods.

Households experiencing food insecurity are the primary benefactors of efforts to increase the amount and quality of food that is donated to community programs. However, businesses, as well as governments and other stakeholder groups also benefit when household food security is enhanced. Adults living in food-insecure households with lower nutrient intakes are more likely to suffer from poor health and develop more chronic diseases and mental health disorders.⁴² Improvements in physical and mental well-being that arise when individuals are able to move from a food insecure to a food secure state yield significant societal and economic gains. In addition, it has been documented that school breakfast programs in the United States result in cognitive and educational benefits, health-related benefits, as well as behavioural and psychosocial benefits for students.⁴³ Fewer demands on healthcare systems, improved education outcomes, and other positive impacts have ramifications for all when household food security is improved.

There are a number of different ways or models to help move households along the food security continuum. As food insecurity is often a multi-dimensional issue, it makes sense to address multiple factors through a variety of efforts. For instance, food banks primarily address issues at the lower end of the food security spectrum by supplying food to households in food emergency situations. Other

types of community organizations and programs address issues affecting households at different points along the food security continuum. The following examples illustrate different approaches to helping move households along the food security continuum toward independent food secure living:

- FoodShare Toronto is a not-for-profit community organization whose objectives include decreasing hunger and promoting health through improved access to affordable food and building community capacity and self-determination by promoting collective activities. In 2013, over 223 thousand children and adults were impacted by their programs, including 7,000 local customers who purchased its Good Food Boxes or shopped at its Mobile and Good Food Markets.⁴⁴ The organization also provides hands-on workshops, networking and training events. In 2013, these events prepared almost 8,000 individuals with the skills and resources to support community gardens, kitchens, markets, and composting.⁴⁵
- New Hope Cuisine is a program within the North Shore Salvation Army (North Vancouver). Donated foods are repackaged into prepared meals which are then donated or sold at low cost (e.g., \$3.50 for a casserole or full course meal). In 2012, the program prevented over 150 metric tonnes of food from going to landfills and also redistributed 75 metric tonnes of food to those in need. The redistributed food included fresh fruits, vegetables, eggs, dairy, and sandwiches.⁴⁶
- Quest is British Columbia's largest not-for-profit food exchange program.⁴⁷ Quest operates four not-for-profit grocery markets. These markets are not open to the public; clients must be referred by partnering Social Service Agencies. Clients are able to access healthy food

44 FoodShare Toronto, *Annual Report 2013*.

45 Ibid.

46 North Shore Salvation Army, *Community Ministries, Food Services*.

47 Quest Food Exchange, *Homepage*.

41 Howard and Edge, *Enough for All*, 23.

42 Vozoris and Tarasuk, "Household Food Insufficiency," 122.

43 Brown, Beardslee, and Prothrow-Stith, *Impact on School Breakfast*.

at an affordable price and “are empowered to make their own choices about what they purchase.”⁴⁸ The program not only assists marginalized individuals transition towards self-sufficiency, it also distributed \$5 million worth of food and prevented 4.4 tonnes of carbon emissions.⁴⁹

- Second Harvest is a food rescue organization that has been operating in Toronto since 1985. Working with grocery retailers, food manufacturers, food distributors, the Ontario Food Terminal, St. Lawrence Market, event planners, hotels and restaurants, its efforts have rescued more than 98 million pounds of food from disposal.⁵⁰ Its Harvest Kitchens program trains adults and youth with barriers to employment in food preparation as they turn “recovered food into nourishing prepared meals”⁵¹ which Second Harvest then delivers to its partner agencies.

Benefits to Businesses

Financial Rewards

Financial rewards are a potentially powerful way to incent businesses to donate food to community charitable organizations. Tax incentives are one approach—specific types of tax incentives are discussed in Chapter 3. Financial incentives are used in other countries to induce businesses that do not currently donate to start, and those that already do to enhance their efforts (e.g., U.S., France, and Spain).⁵² Community food recipients benefit through the increased volumes and availability of donated foods. Food receiving agencies that currently focus on distributing non-perishable foods are more likely to introduce perishables if the incoming volume were significantly increased.

Disposal reduction programs can provide indirect financial incentives for the commercial sector to increase their food donations. Although disposal fees for the ICI sector vary widely by municipality in Canada, these costs represent an area for potential savings for businesses that donate edible food. Further, in jurisdictions that charge extra disposal fees for organic materials, food donations provide a means for businesses to reduce their volume of organic materials and avoid the related disposal costs. Disposal reduction programs that focus on organic materials are already operating in some regions. For example, Prince Edward Island’s Waste Watch program requires businesses across the province to arrange and pay to transport and dispose of organic materials at disposal centres. The disposal fee for organics is \$100 per tonne while the fee for mixed waste is \$230 per tonne.⁵³ By separating their materials and donating any edible food, businesses in PEI can decrease the amount of organic materials they are sending for disposal and save on the associated transportation and tipping fees.

48 Ibid., *Not-for-Profit Grocery Markets*.

49 Quest Food Exchange, *Food Exchange Facts*. (2012 data)

50 Second Harvest, *Food Rescue and Delivery*.

51 Ibid., *Harvest Kitchens*.

52 Jackson, *Charitable Contributions*, 1; BIO by Deloitte, *Comparative Study*, 53.

53 Island Waste Management Corporation, *Disposal Rates*.

Relationship Building and Partnerships

Creating a simple process of donation for businesses would help solve their logistical challenges. Relationship-building is an important part of developing a system that works well for both food donor and food receiving agency. In a recent national survey, 84 per cent of businesses said that it was very important for their community investment efforts to align with their corporate values.⁵⁴ Further, almost 80 per cent of the responding businesses chose their community investment partners based on the partners' demonstrated ability to affect change in the investment area.⁵⁵ Both sides need to identify and communicate their shared values. Partnerships become meaningful when the motivations and needs on both sides are understood. By aligning their values, the partners will be more in-tune with each other, and will make an extra effort when needed. Each partner needs to undertake their own due diligence as well, in order to build trust and confidence in the relationship.

Food Banks Canada is an example of a well-established network of over 3,000 food-related organizations representing every province and territory.⁵⁶ The Food Banks Canada network assists more than 800,000 Canadians each month, sharing healthy food and offering social programs that help to foster self-sufficiency.⁵⁷ Food Bank Canada's ability to forge meaningful relationships with donor partners is founded on communication of shared values. The successful partnership between Moisson Montréal and Metro Inc. demonstrates a mutually beneficial relationship between a municipal-level food receiving agency and a major food retailer. Among other efforts, Moisson Montréal provides twice weekly collection and transportation of edible meat from Metro stores in

Montréal.⁵⁸ Metro benefits from the reduction of labour and costs to unpackage products for composting and recycling while Moisson Montréal gains access to a steady supply of high protein food donations.

Types of in-demand foods may vary locally in accordance with the nutritional needs of the recipient program and cultural preferences of the community. For example, school meal programs may focus on breakfast-type foods only, or snacks, or other meals. At the same time, food programs for children must meet provincial/territorial health requirements. Show Kids You Care leads a national network of meal programs for children affected by poverty and other difficult situations in Canada. The organization raises funds for 700 programs, feeding almost 150,000 children every week.⁵⁹ Each local program conducts its own fundraising and seeks out food donations as appropriate for its location and users. This approach is a model of how to share information with businesses on food donation needs on a local level to ensure that food donors and food receiving agencies are well-matched.

54 The Conference Board of Canada. Unpublished data. To be published in a forthcoming report in Summer 2015 on the emerging trends and impact measurement of corporate community investments.

55 Ibid.

56 Food Banks Canada, *Hunger Count 2014*.

57 Ibid.

58 Interview findings.

59 Show Kids You Care, *Who We Are*.

Corporate Social Responsibility

Corporate social responsibility, or CSR, is a big driver for many companies in their efforts to create goodwill in the communities where they operate. CSR should not be underestimated as an incentive for businesses to donate edible food.⁶⁰ In the past, businesses that initiated CSR activities were seen as leaders in their communities. However, it has become more mainstream and now, businesses that do not participate in one or more CSR areas may be seen as community laggards. In larger companies especially, community engagement is increasingly being introduced into corporate strategic plans as it impacts on corporate sustainability.

Results from a recent national survey showed that the top three reasons for senior leadership teams to support their business' community investment programs are:

1. How well the issue aligns with their overall corporate strategy;
2. Whether the investment enhances the company's reputation;
3. If the investment effort has the ability to engage employees.⁶¹

Forward-thinking businesses recognize the substantial time and effort needed to begin and develop the community relationships that are the foundation of effective CSR programs.

CSR is a particularly strong incentive when donor businesses are able to talk about and promote the effort they are making. Their efforts are often summarized and published in a corporate CSR report. Many other promotional avenues are used, such as corporate newsletters, speeches to employees, clients and communities, as well as blogs and other social media outlets. Almost 70 per cent of the businesses surveyed in a recent national study publish their CSR investments efforts publicly.⁶² Food donor businesses increasingly feel the need to be able to demonstrate to the public and to shareholders that they are socially and ecologically responsible.⁶³

As part of a CSR strategy, it is important for recipient organizations to recognize and validate or show appreciation for the donor businesses' efforts. Food donation recipient organizations can work with the donor businesses to identify the best methods of promoting or communicating their contributions. Local recognition of their efforts is often a key motivation for businesses.⁶⁴

60 Interview findings.

61 The Conference Board of Canada. Unpublished data.

62 Ibid.

63 Interview findings.

64 Ibid.

As part of the CSR incentive package, food donation recipient organizations should be prepared to offer information back to the donor businesses. Data on the impacts of their donations are highly sought after by businesses so that they may report back on their efforts. According to a recent national survey of businesses, the top three business benefits of their community investments that they would like to demonstrate and measure are:

1. The ability to enhance the company's reputation;
2. The support garnered against the corporation's social licence to operate;
3. The ability to enhance the company's marketing and brand identity.⁶⁵

Therefore, documentation of the donations made, write-ups on the impacts of the donations, even anecdotal stories, are desirable pieces of evidence that can encourage businesses to donate edible food. Data that illustrates or demonstrates the impacts they are having on their communities is especially valued.

⁶⁵ The Conference Board of Canada. Unpublished data.

CHAPTER 3 ■ TAX INCENTIVE OPTIONS

Many actors are involved in current efforts to reduce and manage organic waste in Canada. Nevertheless, businesses and governments can both benefit from further reductions in the volume of organic materials entering the waste streams. Tax incentives have been suggested by both commercial food donors and food recipient organizations as a potentially strong driver of increased food donations. Fiscal incentives for food donors have been enacted in other countries and are aimed at increasing food redistribution (e.g., U.S., France, and Spain).⁶⁶

Offering tax incentives is a means of enticing businesses to increase their edible food donations: they can help mitigate declines in food available for donation resulting from improvements in business efficiency.⁶⁷ In addition to the tax incentive for food donations, businesses that divert organic material from waste streams will also reduce their disposal fees, although this benefit will vary by municipality.

Tax Incentive Options

There are several possibilities for linking tax incentives to actual food donations. One approach is to base the tax incentive on the measure or value of edible food being donated. A food donation could be measured by its cost, fair market value, weight, volume, or other method. For weight or volume methods, it may be useful to determine a standard 'unit' of food donation (e.g., 100 kg of produce or 100 L of milk), and then attach the tax incentive to the food donation on a per unit basis. One model for a new tax incentive that is linked to the actual cost of manufactured goods is presented below.

Another approach to creating a new tax incentive is to link the incentive with a desirable business behaviour, such as increasing the donations of certain types of foods, or increasing the frequency of donations. Linking the incentive to an indirect cost of the food donation, such as transportation costs, is another option. Finally, a new incentive could also be linked to disposal fees, which would connect the desired behaviour of donating edible food back with the primary goal of reducing organic waste. Examples of each of these approaches are also presented below.⁶⁸

Using a common set of criteria, projected evaluations are provided for each of the examples. The evaluation criteria include:

1. Effectiveness of incentive – will it result in reduced ICI sector food disposal and increased food donations?
2. Efficiency of incentive – will it result in lower costs and reduced effort for those involved?
3. Equity of incentive – will it benefit businesses fairly?
4. Complexity of incentive – how easy/difficult will it be to implement and use?

It will be important to devise a new tax incentive that does more than benefit or reward existing donors—it should also attract new donors or increase the amount of current donations being made. Incentives must generate sufficient change in behaviour to justify the costs of implementation.

66 Jackson, *Charitable Contributions*, 1; BIO by Deloitte, *Comparative Study*, 53.

67 Feeding America, "*Feeding America Calls*."

68 The values used in the examples are for the purposes of illustration only. Values for an actual policy proposal in Canada would need to be determined through research that is beyond the scope of this report. Further, any value used in a new tax incentive policy would need to be evaluated and adjusted, as needed, over time to ensure attractiveness, relevancy, and fairness.

Option A – Link tax incentive to cost of manufactured goods

This method would use the cost of manufactured or produced goods as the basis for the tax incentive. It is currently being used in the U.S. and in other countries. If this model were to follow the U.S. example, food donors would report only the cost of goods as income. They would then be permitted to deduct the cost of goods of donated items, plus one-half the unrealized appreciation, not in excess of twice the cost of goods.⁶⁹ The result would be a lowered taxable income for the donor business (See box: “Example of Bread Donation” for a comparison of the benefit to a donor business under the current practice and with this incentive in place.)

The model is set out in the U.S. *Good Samaritan Hunger Relief Tax Incentive Act*⁷⁰ which is designed for the U.S. tax system. In the U.S., eligible recipients of donated food include non-profit organizations such as “churches, universities, schools, and hospitals, as well as many other public assistance charities (such as food pantries, soup kitchens, homeless shelters, etc).”⁷¹ The contribution benefit for the donor business is limited to 10 per cent of its taxable income.⁷² In 2014, a permanent update was proposed, the

America Gives More/Good Samaritan Hunger Relief Tax Incentive Act (H.R. 4719) which would see the benefit cap rise to 15 per cent.⁷³ Criticism of the proposal in the U.S. focuses on making the temporary tax provision permanent as it would add to the federal government’s deficit without providing any revenue offset.⁷⁴ France offers another version of a food donation tax incentive based on the cost of producing the food. Food donor businesses can receive a tax break of up to 60 per cent of the value of the donation, and can carry the tax break over for the next five years.⁷⁵ The company values its own donation, which is estimated at net book value: its original cost minus its depreciation. However, if the food donation is close to its ‘best before’ or ‘use by’ date, then the net book value is considered to be zero and the donor cannot benefit from the tax credit.⁷⁶

69 Jackson, *Charitable Contributions*, 3.

70 Ibid.

71 Ibid., 1.

72 Ibid., 2.

73 Committee on Ways and Means, *Fighting Hunger*, 6.

74 Ibid., 14.

75 BIO by Deloitte, *Comparative Study*, 30.

76 Ibid., 59.

Example of Bread Donation

Bread Donation Under the Current Practice ⁷⁷

Giovanni's Bakery gives bread with a fair market value (FMV) of \$1,000 to a local food bank that is a registered charity. The cost of the bread to the company is \$500, half its sale price. The charity gives the business a tax receipt for \$1,000.

Calculation of taxable income

Sales of bread	\$ 50,000
Plus the FMV of bread donated to charity	+1,000

Income	\$ 51,000
Less production costs	- 25,500

Net income	\$ 25,500
Less tax deduction for donated bread	- 1,000

Taxable income	\$ 24,500

BREAD DISPOSAL UNDER THE CURRENT PRACTICE

Giovanni's Bakery bakes \$51,000 worth of bread. It sells \$50,000 worth of bread, and throws out its surplus inventory worth \$1,000.

Calculation of taxable income

Sales of bread	\$ 50,000
Less production costs	- 25,500

Taxable income	\$ 24,500

As shown in the above comparison, there is no financial advantage to the business of donating its product over disposing of it. Under the proposed change (detailed below), the business benefits from a lower taxable income.

⁷⁷ Example taken from Canada Revenue Agency, *Gifts Out of Inventory*.

Bread Donation With Proposed Change⁷⁸

Calculation of taxable income

Sales of bread	\$	50,000	
Plus the cost of bread donated to charity	+	500	

Income	\$	50,500	
Less production costs	-	25,500	

Net income	\$	25,000	
Less tax deduction for donated bread	-	1,000 (limited to 2x the cost)	

Taxable income		\$ 24,000	

⁷⁸ Example adapted from Food Banks Canada, *Stimulating Canada's Charitable Sector*, 5.

Evaluation

1. Effectiveness of incentive

Linking the tax incentive to the cost of goods manufactured or produced would offer a universal benefit to businesses that donate edible food. The incentive would be made available to all types of businesses for all types of foods. Matching the amount of benefit to the actual costs of producing the donation should encourage food donors to maximize their donations. As a result, higher overall volumes of edible food being donated rather than disposed of by the ICI sector would be expected. The simplicity of this approach, in that it relies on only one measure of food donation (i.e., fair market value), would appeal to a wide range of stakeholders.

2. Efficiency of incentive

The approach should be highly efficient, due largely to businesses' familiarity with determining the fair market value of their donated goods. Larger volumes of edible food would be diverted from waste streams to community donation channels, with businesses incurring lower waste

disposal costs as a result. In the short-term, food recipient organizations may face implementation challenges and costs if they do not have the required infrastructure (e.g., transportation or storage) in place.

3. Equity of incentive

An incentive model that is based on manufacturing or production costs associated with food donations will benefit larger businesses more than smaller ones, as they are more likely to have higher volumes of edible food. As discussed later in the chapter, a tax credit is more equitable than a tax deduction.

Businesses that can make high volume donations of edible food would prefer to partner with food receiving agencies that have the infrastructure in place to handle the entire donation. Coordinating and delivering edible food to one partner organization rather than several smaller ones would reduce the costs to the business. As a result, smaller food receiving agencies would be better matched with smaller food businesses.

4. Complexity of incentive

The implementation and administrative burden of this type of incentive would be low because it is based on charitable organizations issuing receipts for the fair market value of food donations, a task they are already familiar with. There would be some administrative work for governments to verify the donor businesses' sales, costs of sales, fair market value appraisals, and other calculations used in determining their taxable income.

Option B – Link tax incentive to amount of food donated

This method would rely on matching tax credits to the volume or weight of donated food, with higher volumes or weights receiving a higher benefit than lower volumes or weights of food donations. The argument for this approach is to increase the overall amount of edible food being diverted from waste streams and donated to community organizations and programs. A tax credit would be offered for each standard unit of food donation. This would require measuring food donations in units based on weight or volume. The method would ideally rely on a simple, universal definition for a unit of food (e.g., one unit of food = 100 kg of food).

Evaluation

1. Effectiveness of incentive

Linking the tax incentive to the amount of food donated would offer a universal approach to food donations. The incentive would be made available to all types of businesses for all types of foods. Matching the amount of benefit to the amount of donation should encourage food donors to maximize their donations. As a result, higher overall volumes of diverted edible food from the ICI sector would be expected. The simplicity of this approach, in that it relies on only one measure of food donation (e.g., weight), would appeal to a wide range of stakeholders.

The universal approach of this option would not necessarily result in higher volumes of fresh food donations. This is a drawback of this option: the incentive offered will not distinguish between different types of food donations. In fact, a model based on the weight of product may deter donations of foods that are lighter in weight (e.g., bread) in favour of heavier products (e.g., canned goods), without regard to relative nutritional value.

2. Efficiency of incentive

This approach would be moderately efficient, due to the universal measure of food donations, but would require weighing or estimating the overall volume of donation. Overall, this approach should result in larger volumes of edible food being diverted from waste streams to community donation channels, with businesses incurring lower waste disposal costs as a result. In the short-term, food recipient organizations may face implementation challenges and costs if they do not have the required infrastructure (e.g., transportation or storage) in place.

3. Equity of incentive

An incentive model that is based on volumes of food donations would benefit larger businesses more than smaller ones, as they are more likely to have higher volumes of edible food. This is true even though larger businesses incurred higher costs to produce the higher volume in the first place. This approach uses a tax credit system, however, which would be more equitable than a tax deduction system. It would also benefit businesses that donate higher weight food, regardless of nutritional value.

Businesses that can make high volume donations of edible food would tend to prefer to partner with food receiving agencies that have the infrastructure in place to handle the entire donation. Coordinating and delivering edible food to one partner organization rather than several smaller ones will reduce the costs to the business. As a result, smaller food receiving agencies would be better matched with smaller food businesses.

4. Complexity of incentive

The implementation and administrative burden of this type of incentive would be moderate. Although it relies on a simple, universal definition for a unit of food, each unit of food donation would need to be measured.

Option C – Link tax incentive to the frequency of food donations

This method would rely on matching tax credits with the volume or weight of food being donated, but would also limit the amount of credit available in a given timeframe. The argument for this approach is to increase the overall amount of edible food being diverted from waste streams through a higher frequency of food donation. Encouraging more frequent donations of perishable food items, such as fresh produce or dairy, would help to ensure their supply in food recipient organizations. A tax credit would be offered for each standard unit of food donation. This would require measuring food donations in units based on weight or volume. The method would ideally rely on a simple, universal definition for a unit of food (e.g., one unit of food = 100 kg of food). In addition, a maximum of credits would be associated with a short timeframe (e.g., maximum of five credits available per week to individual donor businesses).

An alternative approach would be to measure the food donation on the basis of its fair market value and offer tax deductions on a sliding scale of frequency. For example, if a business makes a weekly donation of food for a month (i.e., four donations), it would receive a tax deduction of 50 per cent of the FMV of the first donation, 75 per cent of the FMV of the second donation, 100 per cent of the FMV of the third donation, and 125 per cent of the FMV of the fourth donation. A minimum donation amount would need to be established to qualify for a tax deduction.

Evaluation

1. Effectiveness of incentive

Linking the tax incentive to the frequency of food donated would offer a new approach to food donations. The incentive would be made available to all types of businesses but would prioritize the timing of delivery. Matching the amount of benefit to the frequency of donations should encourage food donors to maximize their diversion of edible food from disposal. The complexity of this approach, in that it relies on a sliding scale of measures of frequency of food donations would render it less attractive to donors, but more attractive to food receiving agencies.

The scaled approach of this option should result in more frequent donations of food, as prioritized by the scale of incentive. This is the chief advantage of this option: the incentive offered would encourage businesses to donate more often. However, a model based on the frequency of donation may intentionally encourage food donors to hold some of their edible food back so that they can divide it into multiple donations. Some spoilage may result from this kind of behaviour, negating the primary purpose of the incentive, which is to reduce the amount of edible food entering the waste streams.

2. Efficiency of incentive

Providing an incentive that is based on frequency of donations should promote higher levels of edible food diversion into donation channels. Administratively, this approach would be less efficient than others as it would require participants to measure and track food donation amounts and frequencies. At the same time, this approach would create more efficient operations by facilitating regular scheduling of donations, allowing for easy planning and coordination for both food donors and food receiving agencies. This would reduce transportation or storage challenges that may result from fluctuating volumes of food donations.

3. Equity of incentive

An incentive model that is based on frequency of food donations would benefit smaller businesses especially, as they are less likely to have high volumes of edible food on hand at any one time. Larger businesses would also benefit, but may need to spend additional effort managing the frequency of their donations if they want to maximize the credit (or deduction) available.

Businesses that can make high volume donations of edible food would prefer to partner with food receiving agencies that have the infrastructure in place to handle the entire donation. Coordinating and delivering edible food to one partner organization rather than several smaller ones would reduce the costs to the business. As a result, smaller food receiving agencies would be better matched with smaller food businesses.

4. Complexity of incentive

The implementation and administrative burden of this type of incentive would be high because it relies on a scaled incentive system. The government, as the tax incentive administrator, would be required to provide education and information on how the incentive works.

Option D – Link tax incentive to the transportation costs

This method would provide a tax incentive based on the actual transportation costs borne by the food donor business when they deliver food donations to community organizations.⁷⁹ The argument for this approach is to offset the extra transportation costs that businesses experience when they donate and deliver food. The simplest way to calculate this option would be to offer a tax credit based on the annual transportation costs of delivering food donations. For example, it could be calculated as the tax credit = mileage costs X 0.25.

Evaluation

1. Effectiveness of incentive

Linking the tax incentive to the transportation costs associated with donating food would offer a universal approach to food donations. The incentive would be made available to all types of businesses for all types of foods. Matching the amount of benefit to the transportation costs associated with making donations should encourage food donors to maximize their donations. As a result, higher overall volumes of edible food being donated rather than disposed of by the ICI sector would be expected. The simplicity of this approach, in that it relies on only one measure of food donation (i.e., transportation costs), would render it attractive to all food donor businesses that deliver their food donations.

The chief advantage of this option is that the incentive offered will lower a barrier to donating food by offsetting a real cost of doing so. However, this approach would not benefit food donor businesses unless they deliver their food donations and incur transportation costs.

2. Efficiency of incentive

This approach would be moderately efficient as it would employ a universal measure of tax incentive, but would require extra record keeping to separate the transportation costs associated with food donations from other business transportation costs. Overall, this approach should result in larger volumes of edible food being diverted from waste streams to community donation channels, with businesses incurring lower waste disposal costs as a result. In the short-term, food recipient organizations may face implementation challenges and costs if they do not have the required infrastructure (e.g., transportation or storage) in place.

⁷⁹ In 2011, a bill was submitted to the U.S. Congress: H.R. 3177, *The Hunger Relief Trucking Tax Credit Act*. This proposal to provide a tax credit for the transportation of food for charitable purposes was considered but not passed. See Washington Watch, *H.R. 3177*.

3. Equity of incentive

An incentive model that is based on transportation costs associated with food donations would benefit all food donor businesses, provided that they incur such costs. There is no benefit or incentive for businesses that do not deliver their food donations.

Businesses that can make high volume donations of edible food would prefer to partner with food receiving agencies that have the infrastructure in place to handle the entire donation. Coordinating and delivering edible food to one partner organization rather than several smaller ones would reduce the costs to the business. As a result, smaller food receiving agencies would be better matched with smaller food businesses.

4. Complexity of incentive

The implementation and administrative burden of this type of incentive would be moderate because it relies on one measure of costs associated with food donations. The administrative burden for food donor businesses would lie in tracking the transportation costs that are associated with food donations and separating those out from other business transportation costs.

Option E – Link tax incentive to waste disposal costs

This method would provide a tax incentive based on the actual waste disposal costs incurred annually by the food donor business. The argument for this approach is to offset business waste disposal costs. Businesses would have to verify that they donate food to community organizations in order to qualify for the credit. Further, a minimum volume of donated food should be tied to credit qualification. The simplest way to calculate this option would be to offer a tax credit based on the annual waste disposal costs incurred by the donor business. For example, it could be calculated as the tax credit = waste disposal costs X 0.25.

Evaluation

1. Effectiveness of incentive

Linking the tax incentive to the actual waste disposal costs incurred annually would offer a universal approach to food donations. The incentive would be made available to all types of businesses for all types of foods. Matching the amount of benefit to the amount of donation should encourage food donors to maximize their donations. As a result, higher overall volumes of edible food being donated by the ICI sector would be expected. The simplicity of this approach, relying on only one measure (e.g., disposal costs), would render it attractive to food donor businesses that are able to identify their annual disposal costs.

The chief advantage of this option is that the incentive offered would lower a barrier to donating food by offsetting a real business cost. It also ties the desired behaviour of donating edible food to disposal costs, thus pushing businesses to make the connection between donating food rather than incurring disposal costs. However, this approach would only benefit food donor businesses that can quantify their own annual disposal costs.

2. Efficiency of incentive

This approach would be moderately efficient as it would employ a universal measure of tax incentive, but may require extra record keeping to identify and quantify the business's annual disposal costs. Overall, this approach should result in larger volumes of edible food being diverted from waste streams to community donation channels, with businesses incurring lower waste disposal costs as a result. In the short-term, food recipient organizations may face implementation challenges and costs if they do not have the required infrastructure (e.g., transportation or storage) in place.

3. Equity of incentive

An incentive model that is based on waste disposal costs would benefit larger businesses more than smaller ones, as they are more likely to have higher volumes of waste and therefore, higher waste disposal costs. Even though larger businesses incurred higher costs to produce the higher volume of waste in the first place, a tax credit would be more equitable than a tax deduction. One drawback to this approach is that the benefit would not be felt universally in all jurisdictions, as waste disposal fees vary widely across Canada.

Businesses that can make high volume donations of edible food would prefer to partner with food receiving agencies that have the infrastructure in place to handle the entire donation. Coordinating and delivering edible food to one partner organization rather than several smaller ones will reduce the costs to the business. As a result, smaller food receiving agencies would be better matched with smaller food businesses.

4. Complexity of incentive

The implementation and administrative burden of this type of incentive would be moderate because it relies on food donor businesses being able to identify their annual disposal costs. These costs are sometimes rolled into tenancy costs, and in other cases, waste costs are shared with other businesses.

Table 4 presents the highlights of the evaluations of the base model and other options described above (more ✓ are desirable).

Table 4 Summary of Tax Incentive Option Evaluations

Model	Effectiveness	Efficiency	Equity	Complexity
Option A – Link tax incentive to cost of manufactured goods	✓✓✓	✓✓✓	✓✓	✓✓✓
Option B – Link tax incentive to amount of food donated	✓✓✓	✓✓	✓✓	✓✓
Option C – Link tax incentive to the frequency of food donations	✓✓	✓	✓✓✓	✓
Option D – Link tax incentive to the transportation costs	✓✓	✓✓	✓	✓✓
Option E – Link tax incentive to waste disposal fees	✓✓	✓✓	✓✓	✓✓

Implementation Challenges

Before such an incentive could be implemented in Canada, there are a number of questions to ask and address. Key considerations for offering a new tax incentive include:

1. What types of incentive would induce behavioural changes?
2. How would the actual incentive work?
3. How would the system be audited?

Each of these critical questions is considered below.

1. What type(s) of incentive would induce behavioural changes?

The two most common forms of incentive are tax deductions and tax credits. Tax deductions reduce an organization's taxable income, while a tax credit reduces its taxes payable. This is an important distinction. The benefit of a deduction rises as an organization's tax rate rises. For example, a deduction of \$1,000 dollars would be a worth \$500 dollars to an organization with a tax rate of 50 per cent, but only \$250 if their tax rate was 25 per cent. In comparison, the benefit of a tax credit is unchanged regardless of an organization's tax rate. Therefore, a tax credit is more equitable than a tax deduction.⁸⁰

Tax credits come in two forms: refundable and non-refundable. An organization will receive the full benefit from a refundable tax credit regardless of whether or not they pay any taxes. For example, if an organization received a \$1,000 tax credit, but paid no taxes, they would receive a \$1,000 refund. In the case of a non-refundable tax credit, the benefit of the credit is limited to the amount of taxes they pay. An organization with a non-refundable tax credit of \$1,000 that only paid \$500 in taxes could only claim \$500 of that credit.

These distinctions matter depending on the potential size of the benefit, and who the incentive is targeting. For example, a deduction would likely be of more benefit for larger businesses. In terms of federal corporate taxes, Canadian businesses face two levels of tax rates: 11 per cent for those under half a million in revenues and 15 per cent for those with revenues above that figure. A deduction would be of more benefit to businesses paying the higher tax rate. So if the intention of a credit were to incent small businesses, such as local restaurants, to donate more edible food, such an incentive may not be particularly effective.

By contrast, a refundable tax credit would likely provide the largest incentive, particularly for small business that may experience more variations in their profits. However, this means such an incentive would also likely result in the highest cost for governments in terms of foregone revenues. Therefore, this type of incentive would be less attractive for governments to implement.

2. How would the actual incentive work?

For a new tax incentive to be implemented and effective, there are technical details that would need to be ironed out. Firstly, there should be a limit or cap on the amount of total credit or deduction available to individual business donors. This is important to government, as the legislator, since they would likely want this to limit the potential negative impact on their finances. Secondly, it is important to note that any such limit would tend to reduce the incentive for large businesses to participate unless the limit is scaled to the size of the business involved.

Another critical factor in take-up is how the value of the tax credit or deduction is determined. The tax credit or deduction would need to apply accurately to each case, each part of the food value chain (excluding producers), and each province and territory. The value could be determined by the fair market value of the donated food, or the cost versus value per weight, or some other method. Once this decision is made, it must also then be determined how that value would be established in each case, and who has authority to monitor, manage, and appeal any such decisions.

Ontario recently introduced a Food Donation Tax Credit for Farmers. It is the only one of its kind in Canada and offers farmers a tax credit valued at 25 per cent of the fair market value of the agricultural products they donate

⁸⁰ Jackson, *Charitable Contributions*, 10.

to community food programs.⁸¹ For businesses, “a tax credit equal to 25 per cent of the corporation’s qualifying donations” for each tax year is available.⁸² Individuals and corporations claim the tax credit by completing the relevant form or schedule as part of their annual income tax return.⁸³ Other programs in Canada target donations of protein in return for a tax credit based on the fair market value of the donation. For example, in southern Alberta, Project Protein is being piloted to encourage cattle and hog producers to donate animals their local food bank.⁸⁴ Although it is still early days for these new tax credits, they may serve as useful models to follow and examine for up-take and effectiveness. In addition, the methods used within these tax credit systems to address quality control issues may be relevant to a new tax incentive system for other businesses in the food supply chain.

In terms of logistical issues, the expected result of higher volumes of food donations may create transportation or storage challenges in the short term for food recipient organizations if they do not already have the required infrastructure in place. However, all food receiving agencies have the right to refuse any donation, including ones that create short term infrastructure pressures.

81 Ontario Ministry of Finance, *Community Food Program Donation Tax Credit*.

82 Ontario Ministry of Finance, *Community Food Program*.

83 Ibid.

84 The Western Producer, “Alta. program gives tax credit.”

3. How would the system be audited?

The introduction of a new tax incentive should include consideration of how the system of implementing and operating the incentive will be audited. Creating an auditing system that is easy to use for all parties would encourage take-up of the new incentive. Questions that need to be answered include:

- What actions or steps will participating food donor and the food recipient organizations need to follow?
- What tax filing requirements will be required of participating food donor and food recipient organizations?
- How will the new tax incentive be communicated and the requirements shared with food donor and food recipient organizations?

Quality control measures should certainly be determined and put into place alongside any new tax incentive.⁸⁵ Such measures would act to ensure that only good quality, edible foods were accepted for donation and were associated with a financial reward. With Ontario’s Food Donation Tax Credit for Farmers, the charitable organization is free to seek out the views of a qualified and competent expert to determine the fair market value of the donation if it is in doubt.⁸⁶ Any new tax incentive for food donations should consider this approach as charitable organizations may not have the expertise, information or human resources available to perform the task of determining the worth of all donated food products.

If a new tax incentive is proposed to motivate food businesses to divert edible food away from the waste streams, the costs and benefits involved for all affected

85 Interview findings.

86 Ontario Ministry of Finance, *Community Food Program*.

stakeholders should be considered. For example, costs to government would include lost business tax revenues and increased costs of tracking, auditing, and enforcement of the new tax incentive. At the same time, the resulting enhanced donations of food would facilitate environmental sustainability through less edible food entering the waste streams, and would increase, improve, or enhance household food security and reduce the use of social services. Food donor businesses may need to supplement their internal accounting systems, but would benefit directly from the tax incentive. Food recipient organizations may need to put in place new or enhanced systems for tracking donations and issuing receipts, but would receive more food donations.

Conclusion

As discussed, there are several ways to approach a new tax credit for businesses that donate food to community organizations. There are also a number of issues and factors to consider if the tax credit is going to be attractive enough to adopt and implement on the part of government, used and understood by food donor businesses, and valued and appreciated by food recipient organizations in communities across the country. Chapter 4 considers some non-tax incentive approaches to encouraging businesses to donate food rather than dispose of it. These could be used on their own or in concert with a tax incentive as part of an 'incentive package' for businesses.

CHAPTER 4 ■ COMPLEMENTARY STRATEGIES

While tax incentives have their place in encouraging higher levels of food donation, employing complementary strategies can also provide the means to change related behaviour. While there has been limited research on the best way to overcome the barriers that potential donors face, it is clear that there is a strong need to bring potential donors, rescue agencies, and policy makers together to find solutions that work for everyone. For example, if a major concern for food businesses is the reputational risk associated with their products moving outside of their control, then tax incentives alone would not induce them to donate their edible food. Some examples of complementary strategies for augmenting commercial food donations include education; centralized warehouse facilities; third-party certification; and other government efforts. Each of these is described below.

Strategy 1 – Education

Further education for businesses on the opportunities and benefits of reducing the amount of waste they produce would help push them toward waste reduction strategies and actions. Information campaigns on the benefits of diverting edible food from the waste streams would encourage food businesses to donate more food rather than dispose of it, reduce their environmental footprint, and help those in need at the same time. Education for businesses on the opportunities and incentives for donating edible food and how they can take action would answer some of their questions which currently hold them back.

For instance, many potential donor businesses are not aware of provincial and territorial legislation that provides liability protection for certified food preparers (e.g., restaurants) when they donate prepared food for children's meals.⁸⁷

Businesses often lack awareness of the current realities of food insecurity in Canada, and more particularly, in their communities. Further, businesses do not necessarily know what foods are most in demand, what they can donate, or how to donate. The B.C. Centre for Disease Control (CDC) is in the final stages of producing guidelines on what constitutes healthy food for donors in that province. Guidelines for donors across the country that mirror this provincial version are also being discussed by the National Zero Waste Council and the B.C. CDC.⁸⁸ Ensuring that the process of donating edible food is easy for businesses helps them to start or to continue participating.

Some food businesses do not know what level of effort would be required for them to donate food (e.g., transporting/delivering food, etc.), so assume that it is easier and cheaper to continue disposing of edible food. Information on the details of being a food donor and what that means for them, and also of what they will receive in return (e.g., promotion) would assist in overcoming any initial hesitancy.

⁸⁷ Interview findings.

⁸⁸ Ibid.

Strategy 2 – Centralized Warehouse Facilities

Strategies to streamline the logistical paths of food donation such that businesses have easy, simple ways to donate food will encourage them to do more. For example, many regions leverage food distribution warehouse systems to store perishable as well as non-perishable foods. Local community organizations, such as food banks, can then access their local warehouse and withdraw food supplies as they need them. For example, Feed the Need in Durham region, Ontario, is a non-profit organization with a large storage capacity. By leveraging distribution centres, the organization attracts donations of edible, nutritious food and non-perishable products from grocery chains. It then makes the edible food available to its 46 member agencies that provide emergency food relief.⁸⁹ Feed the Need can accept large volumes of food because it has established the infrastructure, the distribution channels as well as the relationships with the donor businesses needed for efficient operations.⁹⁰ With no guaranteed source of funding, the organization relies on a mix of fundraising, membership fees, government funding, private donations for its ongoing work.⁹¹ This model works well where there is sufficient demand and resources, but where the logistics of storage and distribution of large volumes of donated food are significant challenges for local receiving agencies.

Strategy 3 – Third-party Certification

A third-party certification or recognition program offers great potential for providing incentives for businesses to participate in food diversion. A centralized measurement and tracking system for commercial food donations would form the basis of a third-party national recognition program. The actual recognition of individual businesses could take the form of a brand such as a logo or series of logos that would be made available for use by the businesses if they met certain criteria for food donations. This type of voluntary certification has been proposed by the City of Winnipeg in its waste management plan. In this example, businesses “that meet specific waste reduction and diversion standards set by the City would be allowed to use recognizable logos and signs to recognize their achievement. The certification would act as a positive public relations tool for businesses and would act as an incentive for businesses to participate in waste reduction/diversion initiatives.”⁹² For food donations, there would need to be minimum content policies and guidelines in place as well as a tracking/auditing system in order for this model to promote meaningful change.

This model of recognition to promote certain types of behaviour has been employed successfully in other sectors. For instance, the Forest Stewardship Council Canada (FSC) issues a unique license code to its authorized trademark users. Use of the FSC trademark indicates that the wood and paper products associated with it have been responsibly sourced.⁹³ Similarly, this model is also used to show minimum recycled content in many products and minimum ethanol standards in fuel.

89 Feed the Need in Durham, *About Us*.

90 Interview findings.

91 Ibid.

92 City of Winnipeg, *Comprehensive Integrated Waste Management Plan*, 14.

93 Forest Stewardship Council Canada, *FSC Trademark Use*.

Strategy 4 – Government Involvement

Efforts to encourage food businesses to modify their behaviour should involve the stakeholder groups involved, including governments. There are a number of ways that governments can offer assistance in encouraging ICI sector food donations:

- Assist the food donation process by addressing logistical challenges and/or managing logistical solutions, such as matching donors with distributors, transportation, and storage as needed in local communities. For example, grants funding for improvements in storage and transportation capabilities would help food receiving agencies to enhance their services.⁹⁴
- Support the development of technological solutions that could assist with the food donation process. For instance, a web-based tool to match donations with needs and infrastructure could provide an easy solution to assigning value to specific types of food items. Food Runners in San Francisco is an example of a food receiving agency that employs technology, including online donation forms, to simplify the donation matching process.⁹⁵
- Link incentives back to the hierarchy of waste: create a system of incentives which offers the highest premium or incentive for diverting food from waste streams to human consumption streams, then to animal consumption streams, and finally to anaerobic digestion and compost.
- Implement a scaled fee structure on waste collection, with edible food being charged a much higher rate than other forms of garbage. This would require enforcement by waste collection agencies.

Non-tax strategies have the potential to drive increases in ICI sector food donations. Moreover, many tax and non-tax strategies could be employed in concert to even greater effect.

⁹⁴ A similar recommendation for increasing food donations in the E.U. has been proposed. See BIO by Deloitte, *Comparative Study*, 63.

⁹⁵ Food Runners, *Donate Excess Food in San Francisco*.

CHAPTER 5 ■ CONCLUSIONS

This report has examined a business case for a tax incentive strategy to encourage businesses to divert edible food from entering organic waste streams and increase their donations of edible food. The food supply chain gives rise to healthy, nutritious food that cannot otherwise be sold due to an oversupply, non-standard characteristics, or the approach of 'best before' dates. Facilitating a decrease in that volume of organic materials entering the waste streams while increasing food donations would result in economic, environmental, and social returns.

By illustrating the food donor environment from the food donor as well as the food recipient side, the path has been widened for new ideas and solutions. In Chapters 3 and 4, a number of complementary options for action, including tax and non-tax incentives were offered as potential approaches for moving forward. These options might be best employed in combination, or in sequence to maximize their effect on reducing organic waste through increased food donations.

Next steps in taking action to incent businesses to change their behaviour could include some or all of the following:

- Conduct new research on where and how a new tax incentive would fit into the existing Canadian taxation system. Scoping out the costs and other impacts of a new tax benefit for businesses would be imperative before its introduction. Extensive primary data collection, analysis, and modelling will be called for to provide these kinds of results.
- Consider international models in this area for ideas on how to encourage businesses to donate edible food. International examples could provide detailed data on the financial benefits for participating businesses as well as the financial impacts for governments in other jurisdictions. Established policies and programs with longitudinal data on outcomes and impacts would be especially helpful in finding ways to successfully address the challenges for food donors and recipient agencies.
- In other jurisdictions where tax incentives for food donations are already available, new research should look at whether the amount of organic waste was reduced in those regions. Results are currently measured by the increase in food donations. The environmental benefits of diverting edible food from the waste streams are often not well documented. Establishing a causal link between organic waste reductions and increased food donations is not a simple task, but primary data and analysis on the economic and environmental benefits of food donations would strengthen arguments for a new tax incentive in Canada.
- Commercial food waste disposal bans are already in place in some municipalities/regions (for example, Nanaimo and Prince Edward Island). In these models, local bylaws prohibit or limit the disposal of commercial and institutional food and organic materials at the local landfills and transfer stations. This approach sets the stage for businesses to consider alternatives for disposing of food for which they have no use and should be encouraged in other municipalities and regions.⁹⁶

⁹⁶ This approach is also recommended in Uzea, Gooch and Sparling, *Developing an Industry*, 23.

- Conduct discussions, new surveys or workshops with businesses, community organizations and governments to examine the challenges of redirecting edible food and potential solutions together, and then establish collaborative frameworks for action.
- Look at other ways to reduce waste associated with food, such as packaging that could be reduced in weight or volume and recycling of packaging materials. This would require working with manufacturers and it would be important to ensure that product health and safety requirements were met.

Finding ways to incent businesses to increase the diversion of organic material from waste streams through edible food donation is an ambitious but commendable aspiration. Continued efforts to solve the inherent challenges for governments and businesses of taking action have great potential for producing substantial economic, environmental, and social benefits.

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Appendix B – Interviews

The following organizations were interviewed for this study⁹⁷:

Feed the Need in Durham

Island Waste Management Corporation

Maple Leaf Foods

Metro Inc.

Metro Vancouver

Moisson Outaouais

Retail Council of Canada

Second Harvest

Show Kids You Care

University of Guelph

VCM International

⁹⁷ Three other organizations were also interviewed, but declined to be named in the report.





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