Introduction

RECYC-QUÉBEC and the City of Montreal have commissioned Value Chain Management International to estimate the volume of food loss and waste (FLW) occurring in the province of Quebec from a whole of chain perspective, then extrapolate the findings in terms of greenhouse gas (CO2E) emissions.

As an expert industry stakeholder, we would greatly appreciate your completing a survey that we have designed to enable us to estimate loss factors in specific sectors and food types. The information that you provide is completely confidential. Only aggregated results at an industry level will be reported. No individuals or organizations will be identified at any stage of the analysis and reporting.

In completing the survey, please respond in terms of a typical year; therefore, prior to the onset of the COVID-19 crisis that began in March 2020.

Please complete the survey by Monday, March 1.

If you have any questions about the survey and overall study, please contact Dr. Martin Gooch (martin@vcm-international.com) or Mariane Maltais Guilbault m.maltais@recyc-quebec.gouv.qc.ca.

dentifiers	
* 1. What is yo Retail Foodservice	
2. What is your or	ganization's primary location?
Postcode	
Closest city/town	

RECYC-QUEBEC FLW Survey – Food Distributer / Wholes	saler	Whole	uter /	Distribu	/ – Food	Surve	EBEC FLW	RECYC-OL
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Scale of Operation

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4. In **metric tonnes**, what total quantity of products did you handle in 2019 or would handle in a typical year? For *liquids*, *please use the calculation of 1000 litres = 1 MT*. **Please use numbers only.**

5 P	lease indicate which products your organization handles
	Beans and lentils
	Confectionary/candy
	Dairy (milk, cheese, butter, yogurt, etc.)
] Eggs
	Fish and seafood
	Fruits and vegetables
	Grains (e.g. bread, baked goods, pasta, rice, etc.)
	Meat products (beef, chicken, pork, lamb, etc.)
	Soy products
	Maple syrup
	Beer/sprits
	Cider/wine
	Juices
	Pop/soft drinks
	Tea/coffee

Unavoidable and Unplanned Losses

Each type of loss is described below.

A. Unavoidable losses are inevitable – you expect them to occur during your normal course of business.

B. Unplanned losses are typically caused by supply, internal operations, or market related factors – resulting in unsaleable products due to quality issues and damage, products reaching expiry dates, orders being cancelled, or products being rejected/returned.

6. For each of the types of foods/beverages listed below, in **metric tonnes**, what quantity of **unavoidable** loss does your organization experience each year? *For liquids, please use the calculation of 1000 litres = 1 MT.* Please ignore options that are irrelevant to you and **answer with numbers only**.

Beans and lentils	
Confectionary/candy	
Dairy (milk, cheese, butter, yoghurt, etc.)	
Eggs	
Fish and seafood	
Fruits and vegetables	
Grains (e.g. bread, baked goods, pasta, rice, etc.)	
Meat products (beef, chicken, pork, lamb, etc.)	
Soy products	
Maple syrup	
Beer/spirits	
Cider/wine	
Juices	
Pop/soft drinks	
Tea/coffee	

7. For each of the types of foods/beverages listed below, in **metric tonnes**, what quantity of **unplanned** loss does your organization experience each year? *For liquids, please use the calculation of 1000 litres = 1 MT.* Please ignore options that are irrelevant to you and **answer with numbers only**.

Beans and lentils	
Confectionary/candy	
Dairy (milk, cheese, butter, yoghurt, etc.)	
Eggs	
Fish and seafood	
Fruits and vegetables	
Grains (e.g. bread, baked goods, pasta, rice, etc.)	
Meat products (beef, chicken, pork, lamb, etc.)	
Soy products	
Maple syrup	
Beer/spirits	
Cider/wine	
Juices	
Pop/soft drinks	
Tea/coffee	

8. Please identify whether the unavoidable and unplanned losses primarily occur internally within your operations (IN) or outside your operations (OUT) during their distribution to customers.		
	Unavoidable loss	Unplanned loss
Beans and lentils		
Confectionary/candy		
Dairy (milk, cheese, butter, yoghurt, etc.)		
Eggs		
Fish and seafood		
Fruits and vegetables		
Grains (e.g. bread, baked goods, pasta, rice, etc.)		
Meat products (beef, chicken, pork, lamb, etc.)		
Soy products		
Maple syrup		
Beer/spirits		
Cider/wine		
Juices		
Pop/soft drinks		
Tea/coffee		
9. Indicate whether the quantities that you provided above were measured or are estimated. Measured / Estimated		
Unavoidable loss		
Unplanned loss		
10. Identify if your organization is actively working to reduce its unavoidable or unplanned losses. Yes / No		
Unavoidable loss		
Unplanned loss		

Loss Management

11. Estimate the **percentage (%) of unavoidable and unplanned loss that would be edible**, either in its present form or after processing into foods or nutritional supplements. (Please enter numbers only.)

Unavoidable loss	
Unplanned loss	

12. Select from the list below the top three destinations of the **unavoidable** and **unplanned** losses that you identified in Q11, and indicate the percentage that is directed to each of the three destinations.

	Percentage of unavoidable loss	Percentage of unplanned loss
Rescue/redistribution for human consumption		
Upcycling into foods, nutritional supplements, etc.		
Animal feed		
Biomaterial processing/rendering		
Biomethanisation (anaerobic digestion)		
Compost		
Land application		
Incineration or controlled combustion		
Landfill/burial		
Other (e.g. sewer)		

13. Does your organization monitor the CO2 emissions associated with food loss and waste?

- 🔵 Yes
- 🔵 No

Loss Management (Continued)

14. If yes to the above, what is the quantity of CO_2 ?

15. Is the figure above a measurement or an estimate?

Measured

Estimated

Causes of Losses

16. On a scale of 1 to 5, please rate the impact of each factor listed below on the **unavoidable** losses that you experience? (1 = minor impact; 3 = moderate impact; 5 = significant impact). Please ignore any causal factor that is irrelevant.

	1	2	3	4	5
Inaccurate forecasts	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Changes to customer orders	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Customer (over) specifications	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Poor quality inputs	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Date code (products reach "best before" / "use by" dates)	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Equipment malfunction/failure, mechanical damage	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Storage/inventory losses	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Human factors	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Other - please specify in comment box below	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc

Comment

17. On a scale of 1 to 5, please rate the impact of each factor listed below on the **unplanned** losses that you experience? (1 = minor impact; 3 = moderate impact; 5 = significant impact). Please ignore any causal factor that is irrelevant.

	1	2	3	4	5
Inaccurate forecasts	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Changes to customer orders	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Customer (over) specifications	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Poor quality inputs	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Date code (products reach "best before" / "use by" dates)	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Equipment malfunction/failure, mechanical damage	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Storage/inventory losses	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Human factors	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Other - please specify in comment box below	\bigcirc	\bigcirc	\bigcirc	\bigcirc	\bigcirc
Comment					

RECYC-QUEBEC FLW Survey – Food Distributer / Wholesaler

Conclusion

18. Thank you for participating in this important study. Is there anything further that you would like to add on the topic of food loss and waste in Quebec, and its prevention?

19. Would you be willing to participate in a short follow-up interview?

- O Yes
- 🔵 No

20. If yes, please provide your contact details:

Name	
Company (optional)	
Email Address	
Phone Number	