

RECYC-QUÉBEC FLW Survey – Food Processor or Manufacturer

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.

Please complete the survey by Thursday, April 15.

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.

RECYC-QUÉBEC FLW Survey – Food Processor or Manufacturer

Identifiers

* 1. What is your primary business? **(Choose one only)**

- Primary processing (e.g. slaughter of livestock, milling of flour)
- Fresh produce (e.g. grading and packaging of fresh produce)
- Processed produce (e.g. pre-cut fruit, bagged salads, fruit juices)
- Food manufacturing (e.g. further processed meat, bread/bakery, confectionary)

2. What is your organization's primary location?

Postcode

Closest city/town

3. How many facilities do you operate in Quebec?

RECYC-QUÉBEC FLW Survey – Food Processor or Manufacturer

Scale of Operation

4. Please briefly tell us what you produce in your processing facilities (e.g. bagged salads, bread, soup, meat, frozen fish).

5. In **metric tonnes** (MT), what was your total production in 2019 or a typical year? For liquids, please use the calculation of 1000 litres = 1 MT. **Please use numbers only.**

6. Please indicate which products your organization uses in your production.

- 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

RECYC-QUÉBEC FLW Survey – Food Processor or Manufacturer

Unavoidable and Unplanned Losses

Each type of loss is described below.

A. Unavoidable losses are inevitable and are typically not edible – such as husks, vegetable peelings, skin, and bones withdrawn during processing.

B. Unplanned losses are foods and beverages that were destined for human consumption, though become unsaleable due to supply, internal operations, or market related factors. For reasons such as quality issues and damage, products reaching best before dates, orders being cancelled, or their rejection by a customer, these once edible foods are removed from the food system for human consumption.

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

8. 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

9. Please identify whether the **unavoidable** and **unplanned** losses primarily occur during production or post production/processing (e.g. while in storage or during distribution). Please ignore options that are irrelevant to you.

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

10. Indicate whether the quantities that you provided above were measured or are estimated.

	Measured / Estimated
Unavoidable loss	<input type="text"/>
Unplanned loss	<input type="text"/>

11. Identify if your organization is actively working to reduce its unavoidable or unplanned losses.

	Yes / No
Unavoidable loss	<input type="text"/>
Unplanned loss	<input type="text"/>

RECYC-QUÉBEC FLW Survey – Food Processor or Manufacturer

Loss Management

12. 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

13. Select from the list below the top three destinations of the **unavoidable** and **unplanned** losses that you identified in Q12, 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	<input type="text"/>	<input type="text"/>
Upcycling into foods, nutritional supplements, etc.	<input type="text"/>	<input type="text"/>
Animal feed	<input type="text"/>	<input type="text"/>
Biomaterial processing/rendering	<input type="text"/>	<input type="text"/>
Biomethanisation (anaerobic digestion)	<input type="text"/>	<input type="text"/>
Compost	<input type="text"/>	<input type="text"/>
Land application	<input type="text"/>	<input type="text"/>
Incineration or controlled combustion	<input type="text"/>	<input type="text"/>
Landfill/burial	<input type="text"/>	<input type="text"/>
Other (e.g. sewer)	<input type="text"/>	<input type="text"/>

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

Yes

No

RECYC-QUÉBEC FLW Survey – Food Processor or Manufacturer

Loss Management (Continued)

15. If yes to the above, what is the quantity of CO₂?

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

Measured

Estimated

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Causes of Losses

17. 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	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Changes to customer orders	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Customer (over) specifications	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Poor quality inputs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Date code (products reach "best before" / "use by" dates)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Equipment malfunction/failure, mechanical damage	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Storage/inventory losses	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Human factors	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other - please specify in comment box below	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Comment

18. 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	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Changes to customer orders	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Customer (over) specifications	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Poor quality inputs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Date code (products reach "best before" / "use by" dates)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Equipment malfunction/failure, mechanical damage	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Storage/inventory losses	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Storage at inappropriate temperatures when leaving the factory (transport / handling)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Human factors	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Other - please specify in comment box below	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Comment

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Conclusion

19. 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?

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

Yes

No

21. If yes, please provide your contact details:

Name

Company (optional)

Email Address

Phone Number