



## Macro Perspective on Canada's Food Waste Situation

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[conferenceboard.ca](http://conferenceboard.ca)

## Part 1: Centre for Food in Canada.

- To raise public awareness of the nature and importance of the food sector to Canada's economy and society,
- To create a shared vision for the future of food in Canada articulated in a framework for a **Canadian Food Strategy** to meet our country's need for a coordinated long-term strategy for change.





## Five Pillars of CFIC and the Canadian Food Strategy (CFS).



## Canadian Food Strategy Eight Goals.

### 1st Element: INDUSTRY PROSPERITY

- Goal 1: The food sector is viable and prosperous for producers, fishers, manufacturers, processors, distributors, importers and exporters, retailers and food services.
- Goal 2: The food sector is innovative, competitive and growing.
- Goal 3: Up-to-date policies, laws and regulations address food industry and household interests.

### 2nd Element: HEALTHY FOOD

- Goal 4: Canadians eat healthier, and have balanced diets.
- Goal 5: Canadians have low rates of food-related chronic diseases, including obesity, diabetes, cardiovascular disease, and cancer.

### 3rd Element: FOOD SAFETY

- Goal 6: Canada is the world leader in food safety.

### 4th Element: HOUSEHOLD FOOD SECURITY

- Goal 7: All Canadians have physical and economic access to safe, nutritious and affordable food that meets their dietary needs.

### 5th Element: ENVIRONMENTAL SUSTAINABILITY

- Goal 8: The food sector is an excellent environmental performer that increases food production sustainably.





## Canadian Food Strategy Structure.

**8 Goals:** high-level and aspirational;

**Outcomes:** major changes to performance (including *food waste*);

**Actions & Initiatives:** workable solutions (including practices, policies, programs) to achieve outcomes like *improving household*

*food waste literacy*);

**Leads:** businesses, governments, education, communities and others who could take the lead on specific actions; and

**Metrics:** clear targets and measures to track progress.



## 20 Research Reports.





## National Consultations.

- Vital in order to build a Canadian Food Strategy with broad appeal.
- On-line data collection,
- three national food summits,
- a variety of live consultation events from coast to coast to coast, involving hundreds of organizations and large numbers of individuals.



## CFS Launch: 3<sup>rd</sup> National Food Summit

- Take part March 18-19, 2014 in Toronto!
- Unveiling of the Strategy – and action to follow:
- Plans for Implementation
- Next steps for CBoC – a kind of ‘Food Agency’ to help with engagement, support, and tracking progress.
- Intention: moving forward in a cohesive way, strategically, together.

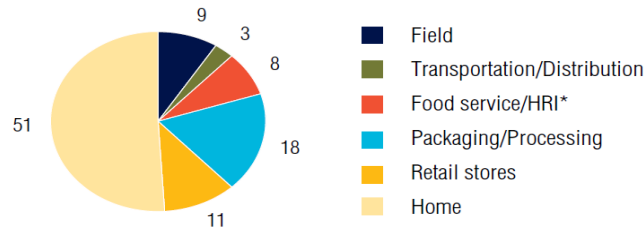




## Part 2: Food Waste in Canada.

- Canadian food system wastes as much as 40 per cent of all food, equivalent to \$27.7 billion annually.
- Over half at the household level.

Food Waste From Farm to Fork  
(per cent)



\*HRI=hotel, restaurant, institution

Source: Gooch, Fefel, and Marenick, *Food Waste in Canada*.



## Food Waste in Canada.

- Developed countries waste a high proportion of their food!
- Canada is no exception – est. \$27 billion of food is wasted annually.
- Result: reduced profits, higher prices, negative environmental impacts, and more food insecurity.
- Much waste is *avoidable*.





## Canadian Food Waste Statistics.

- Up to 40 per cent of all food produced is wasted.
- Est. annual cost = \$27 billion.
- 51 per cent of waste comes from households = \$13.8 billion.
- 13.3 million Canadian households in 2011, on average waste:
  - **\$86 of food per month.**
  - **\$1,034 of food each year;**



## CFIC Household Survey.

- Q: On average, how many grocery bags of food that you buy each week do you end up throwing out?
  - 11 per cent reported throwing out *two bags of food or more* a week.
  - 23 per cent reported throwing out *one bag* a week;
  - 66 per cent reported *zero* bags a week;



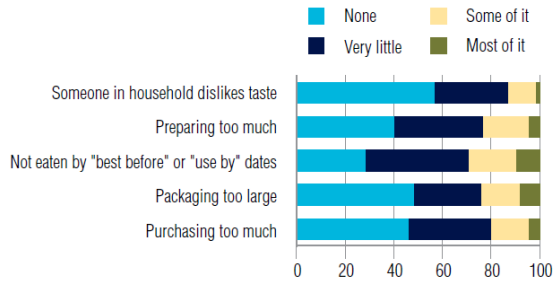


## Household Food Waste.

### • Food waste results from:

- food not being eaten by “best before” or “use by” dates.
- package sizes that are too large.
- preparation of too much food.

Reasons for Household Food Waste  
(percentage of respondents)



Source: The Conference Board of Canada.



## Other Food Waste Measures.

- In 2007, only 71 per cent of the calories purchased in Canada were consumed (Statistics Canada measurement of waste at the household level).
- American food waste is about 27 per cent (U.S. Department of Agriculture).
- 30-50 per cent of all food produced in developed and developing countries is not eaten. (*Economist*).
  - “if Western waste could be halved and the food distributed to those who need it, the problem of feeding 9 billion people would vanish.”





## Food Waste: A Significant Risk.

- Food waste is a significant economic and environmental challenge, and understanding how to manage it is complicated.
- Data gaps inhibit our understanding of global food loss and waste.
- Yet, enough is known about food waste to make it recognized as a major economic and environmental risk governance priority in Canada, and around the world.



## Negative Impact on Landfills.

- Food waste creates and expands landfills or composting sites.
  - Single largest component of municipal solid waste generation reaching landfills and incinerators in the U.S.
  - U.S. landfills account for 20% of all methane emissions, thus a source of greenhouse gas emissions (methane is a greenhouse gas 21 times more damaging to the climate than carbon dioxide).







## **Increases Water and Energy Use.**

- U.S. uses 70 per cent of its freshwater supply for agricultural production.
- Over 25 per cent of the water is accounted for by wasted food – approx. 40 trillion litres/yr.
- Average U.S. farm uses 3kcal of fossil fuel energy to produce 1kcal of food.
- Energy consumption to process food in Canada continues to rise each year.



## **Waste Footprint is Substantial.**

- Footprint and ineffective practices difficult to quantify but data and analysis indicate a real problem.
- More food production required (with larger environmental impacts) than is strictly needed to meet market demand.
- The waste footprint of the food system includes inefficient use of resources along the supply chain.
- Draws down the world's supply of non-renewable resources, while indirectly generating more emissions than otherwise required.

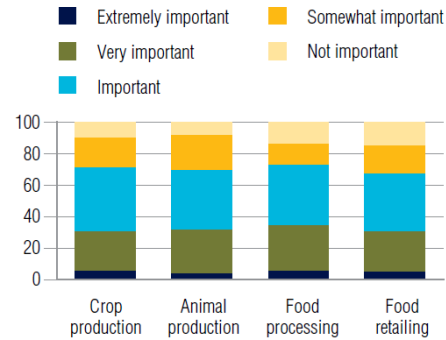




## Yet: Lower Priority Consideration

- Results from the Centre for Food in Canada industry survey suggest that improving environmental performance is not a high priority consideration for most food businesses.

Business Perceptions of Importance of Environmental Performance for Success (percentage of respondents)



Source: The Conference Board of Canada.



## Less of a Priority for Business

- Environmental performance only 8<sup>th</sup> in importance compared with 11 other factors.
- Well below cost reduction, customer satisfaction and food safety.

Business Perceptions of Key Factors for Success (percentage of respondents answering "very important" or "extremely important")



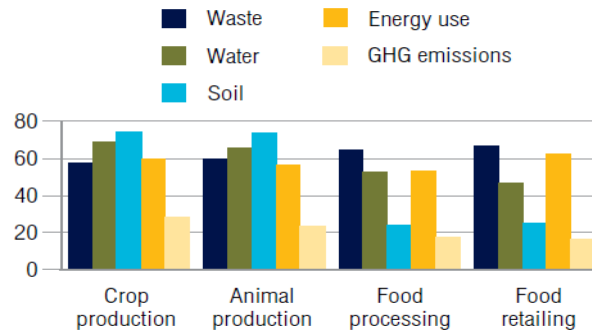
Source: The Conference Board of Canada.





## Response is Greater When Tied to Business Interests.

Industry Respondents That Monitor for Impacts  
(per cent)



Source: The Conference Board of Canada.



## Environmental Practices on the Rise.

- Producers increasingly adopt Beneficial Management Practices. (BMPs)
- Eco-efficiency gains in food and beverage industries.
  - “Businesses that incorporate sustainable practices have had greater financial success.” World Business Council for Sustainable Development .
  - Benefits include lower production costs, improved product function and quality, increased market share, improved environmental performance, improved relationships with stakeholders, and lower risks.





## Example: Nestlé Canada.

- Food processors are undertaking actions to make efficiency gains and cut outputs of waste water and organic discharges etc.
  - Energy-use reductions of 10% (2002-07).
  - GHG emission reductions of 19%.
  - Waste reductions of 58% since 1998.
  - By-product and waste recovery greater than 75%.



## Other Examples.

- Nitrogen reduction in the potato crop through McCain Foods' Good Agriculture Practices program.
- Heinz water-use reductions of 35% through adoption of drip irrigation techniques in tomato crops.
- Increasing Marine Stewardship Council and other sustainability certifications in the fisheries and aquaculture sector.
- Retail level eco-efficiency improvements to retail in high energy demand areas, e.g. lighting, heating, air conditioning, and refrigeration.

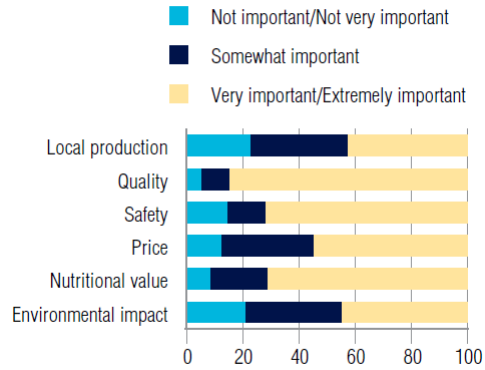




## Consumer Purchase Decisions.

- Consumers, do not let environmental concerns trump concerns over nutrition, quality, safety, or price.
- They will pay a premium for green products *if* they provide added benefits.

Factors Affecting Food-Purchasing Decisions  
(percentage of respondents)



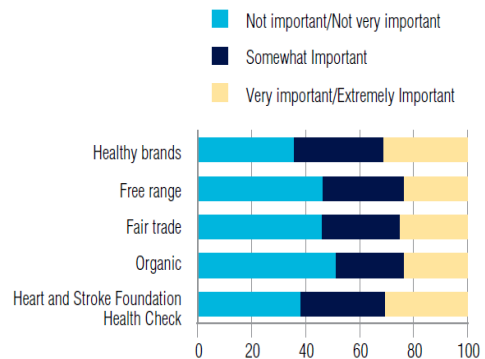
Source: The Conference Board of Canada.



## Food Label Importance.

- Empower consumers through eco-labels.
- Reward for environmental leadership.
- Eco-labelling plays a fairly minor role in product differentiation, mainly organic produce.
- Reputable eco-label with a Canadian branding would be very well received.

Label Importance in Food-Purchasing Decisions  
(percentage of respondents)



Source: The Conference Board of Canada.





## Recommended Key Actions: Report.

- Collect adequate food waste evidence/data.
- Motivate and support improved business environmental performance and practices.
- Improve household food waste literacy:  
Consumers can contribute to environmental risk management by demanding foods that perform to higher environmental standards and by reducing their own food waste.
  - *Addressing the Environmental Impacts of the Food System (August, 2013)*



## Recommended Key Actions: Report

- Develop food eco-labels for retail products.
- Add “Green” to agricultural policy and link to income support programs.
- Develop concrete and measurable food sustainability objectives.
- Create a Canadian Agri-Food Environmental Governance System.
  - *Addressing the Environmental Impacts of the Food System (August, 2013)*





## Part 3: Food Waste Actions from CFS Goals.

### 1st Element: INDUSTRY PROSPERITY

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## Food Waste: Canadian Food Strategy.

- Goal 3, Outcome 3.1

**(Laws and regulations are updated and modernized.)**

- Action:

– Standardize and harmonize provincial and territorial food waste management and recycling laws and regulations in order to reduce, reuse and recycle waste on a larger scale.





## Reduce Waste & Improve Security.

- Update regulations – provide *tax incentives* and introduce *Good Samaritan laws* to encourage and provide legal protection (e.g. from liability) for orgs. that contribute to food redistribution programs.
- Build food waste plans more centrally into government programs, at all levels.



## Food Waste: Canadian Food Strategy.

- Goal 8, Outcome 8.1  
**(Waste generated by industry and consumers is significantly reduced or reused).**
- Actions:
  - Improve supply chain efficiency to minimize waste at all stages of the food system, including energy use, components and ingredients.
  - Help households become waste-conscious and knowledgeable so they store and use food with less waste.







## Industry Solutions.

- Apply “lean” management principles to ***maximize customer value*** while ***minimizing waste***.
- Invest in innovation, collaborate with other businesses, to identify new creative solutions to reduce food waste.
- Use public-private partnerships to engage public and encourage behaviour change.



## Food Waste: Canadian Food Strategy.

- Goal 8, Outcome 8.1  
**(Waste generated by industry and consumers is significantly reduced or reused).**
- Actions:
  - Implement municipal waste bin systems across Canada to collect food waste and allow its further use.
  - Use food waste as a source of bio-energy, compost and fertiliser.





## Food Waste: Canadian Food Strategy.

- Goal 8, Outcome 8.2  
**(Environmental food literacy levels rise).**
- Action:
  - Improve household food waste literacy through education and awareness raising to change household purchasing, preparation, storage and discarding behaviours.



## How to Cut Household Waste.

- Target programs/communication at food waste in the home.
- Educate Canadians about *the amount* of food wasted and *how to improve*.
- Provide households and individuals with practical ‘use it, don’t lose it’ strategies and techniques, based on real life behaviours, identified in consumer surveys and case studies.





## Food Waste: Canadian Food Strategy.

- Goal 8, Outcome 8.2

**(Environmental food literacy levels rise).**

- Actions:

- Run TV, radio and on-line advertising campaign to make Canadian public aware of facts on problems of food-related sustainability.
- Schools develop mandatory food literacy skills programs that include environmental elements.



## Food Waste: Canadian Food Strategy.

- Goal 8, Outcome 8.7

**(Canada has a low carbon food system which is efficient with resources).**

- Action:

- Reuse, recycle and use waste for energy generation.





## Food Waste: Canadian Food Strategy.

- Goal 8, Outcome 8.9

**(Fisheries and aquaculture's environmental sustainability performance is improved).**

- Action:

–Reduce and or reuse (market/donate) bycatch or bushed (discarded fresh water fish of lower value) wild and fresh fish and seafood stocks.



## Conclusions.

- Food waste is a central challenge of our food system (and figures in CFS).
- Needs a combination of gov't regulations and programs, industry strategies, civil society efforts, and consumer change.
- Positive change benefits all: industry prosperity, environmental sustainability of the food sector, broader household food security, better health and well-being of consumers!





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