Macro Perspective on Canada’s Food Waste Situation

Dr. Michael Bloom  
Vice-President, Organizational Effectiveness and Learning  
The Conference Board of Canada  
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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: 3rd 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.

![Pie chart: Food Waste From Farm to Fork (per cent)]

*HRI=hotel, restaurant, institution
Source: Gooch, Felfel, 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.

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.

![Chart showing business perceptions of importance of environmental performance for success]

Source: The Conference Board of Canada.

Less of a Priority for Business

- Environmental performance only 8th in importance compared with 11 other factors.

- Well below cost reduction, customer satisfaction and food safety.

![Chart showing business perceptions of key factors for success]

Source: The Conference Board of Canada.
Response is Greater When Tied to Business Interests.

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.
  – GHG emission reductions of 19%.
  – 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.

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.
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

(\textit{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!