



Environment and  
Climate Change Canada

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Canada

## ECCC ENGAGEMENT ON FOOD WASTE REDUCTION IN CANADA



International Conference on Food Waste & Loss  
Washington DC  
7-9 November 2016

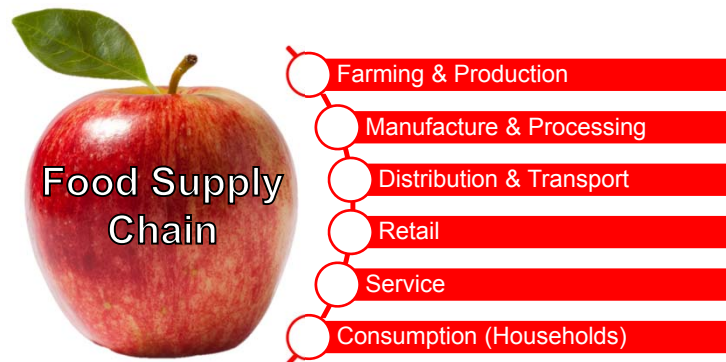
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- Defining food waste
- Benefits of food waste reduction & recovery
- International commitments
- ECCC activities

## Definitions for food waste may vary

- Food that is discarded, lost & uneaten throughout all stages of the food supply chain
- Tendency to focus on avoidable food waste



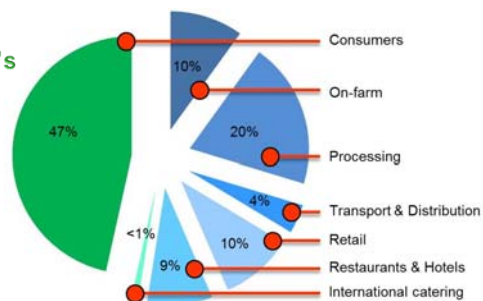
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## Over \$31 billion of food is wasted each year in Canada

- About 40% of all food produced in Canada is wasted
- Equivalent to 30% of the total economic value generated by agriculture & agri-food in Canada in 2013
- Food waste costs the average household \$1,456 / year

### Distribution of Food Waste Across Canada's Food Value Chain

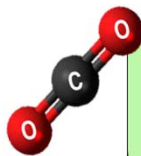
(Value Chain Management, 2014)



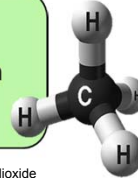
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## Food waste contributes to climate change

- Canadian households & retailers lost or wasted 6 Mt of food in 2010 (Agriculture & Agri-Food Canada estimate)
- Food waste throughout Canada's entire food supply chain is estimated to be 10.5 Mt (using food value chain percentages)
- Emits 20 Mt eCO<sub>2</sub>\* of greenhouse gases across food life cycle (nearly 3% of national GHG emissions)



Each tonne of food waste emits 1.9 t eCO<sub>2</sub> of greenhouse gases across the food supply chain (European Commission, 2011)

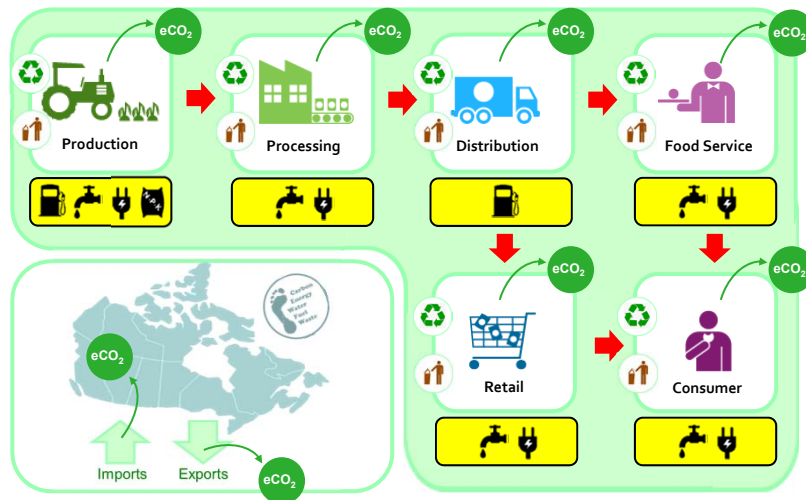


\* Note: eCO<sub>2</sub> = equivalent to carbon dioxide

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## All stages of the food supply chain have environmental footprints



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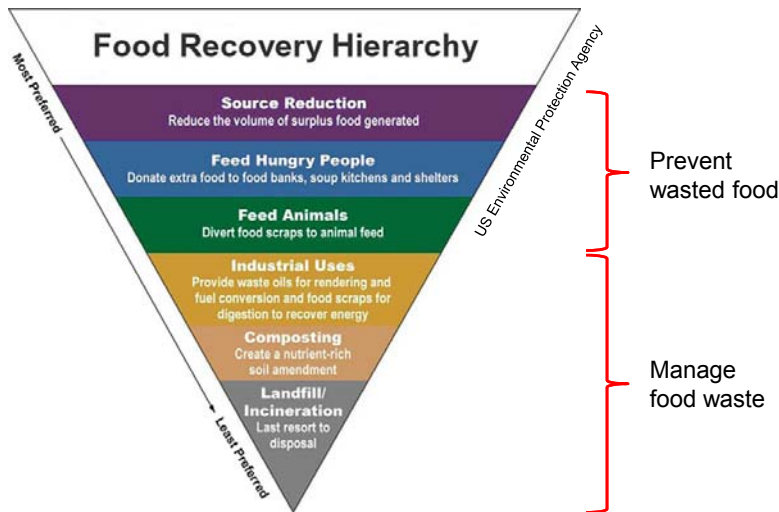
## Reducing food waste has several benefits

- Reduces economic losses throughout food supply chain
- Decreases short-lived climate change pollutants & other GHG
- Reduces resource loss & consumption
- Decreases reliance on landfills to dispose of food waste
- Combats food insecurity & helps to feed hungry people
  - 13% of Canadians live in a state of food insecurity
  - Food insecurity concerns may increase as populations grow



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## The “food recovery hierarchy” can guide action



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## International commitments related to food waste are in place

- **UN Agenda 2030 Sustainable Development Goals (Sep 2015)**  
*Target 12.3: By 2030, halve per capita global food waste at the retail and consumer levels & reduce food losses along production & supply chains, including post-harvest losses.*
- **UN Environment Assembly Meeting 2 (May 2016)**  
*Resolution 9: Prevention, reduction and reuse of food waste – Encourages collaboration in developing & implementing programmes, supporting international approaches to improve food waste measurement, and sharing knowledge & good practices to reduce food contamination.*
- **G7 Toyama Environment Ministers' Meeting (May 2016)**  
*Identified initiatives for organic waste including food loss & waste that could be included in the 10-Year Framework of Programmes on Sustainable Consumption & Production Patterns.*
- **NAFTA North American Leadership Summit (Jun 2016)**  
*commit to develop & implement national methane reduction strategies for key sectors including food waste & reiterate support for related CEC North American Initiatives on food & organic waste.*



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## **ECCC recognizes food waste as an important issue**

- Social, environmental & economic considerations
- Collaboration is essential for success (governments, industry, businesses, NGO, consumers)
- Opportunities for improvement exist across all stages of the food supply chain



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## **ECCC activities linked (& potentially linked) to food waste**

- NAFTA Commission for Environmental Cooperation
  - North American Initiative on Food Waste Reduction & Recovery
  - North American Initiative on Organic Waste Processing & Diversion
- Canadian Council of Ministers of the Environment
  - Waste Management Task Group (Organic & ICI waste)
- Pan-Canadian Framework for Clean Growth & Climate Change
  - Decision of First Ministers at the Vancouver Declaration (Mar 2016)
  - Concrete plan to achieve Canada's international commitments under the Paris Agreement & UN Framework Convention on Climate Change
  - Working Group on Specific Mitigation Opportunities will table report on options to promote clean growth & achieve reductions (Nov 2016)

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## What's on the horizon?

- Continue to develop knowledge, expertise & capacity
- Strategize opportunities for food waste reduction & recovery
  - Collaborate & explore synergies with governments, businesses & others
  - NAFTA CEC workshop on food waste reduction & recovery (Toronto, Canada, Feb 2017)
- Contribute to a national food policy
  - Agriculture & Agri-food Canada lead
  - Potential references to food waste reduction & recovery

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## Food waste has multiple dimensions with shared roles & responsibilities

Measurement Portion size **Donation liability** Cold chain management  
**Date labelling** Education **Trim waste**  
Trayless dining **Food preparation** Best practices Packaging adjustments  
**Inventory management** **Donation transport**  
**Field greening** Manufacturing-line optimizations Donation tax credits  
**Imperfect produce** Market saturation  
Donation matching software Value-added processing **Secondary sellers**  
**Access to healthy food** Donation storage & handling  
Spoilage Prevention Packaging **Training** Operator error Contamination  
**Expansive menu options** Food safety issues **Training**  
Inaccurate forecasting **Attitude** Poor record-keeping Rejected shipments  
**Excess purchasing** Delivery fluctuations **Marketing**

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## We'd like to hear what you think?



**Thank you**

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