

# From Farm to Fork

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**Reducing Food Waste in a Circular Economy**

**University of Guelph, Ontario– May 2017**

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Hilary French. Programme Officer. UN Environment – North America Office

# Recognising that:

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- We produce enough food to feed the world's population, and yet **800 million people suffer from hunger** today,
- At least **one third of food is wasted** every year,
- At a cost of \$750 billion,
- Generating **8% of global GHG emissions...**
- Accounting for 21% of **freshwater** consumption, 19 % of **fertilizer** use, and 18 % of **cropland**.

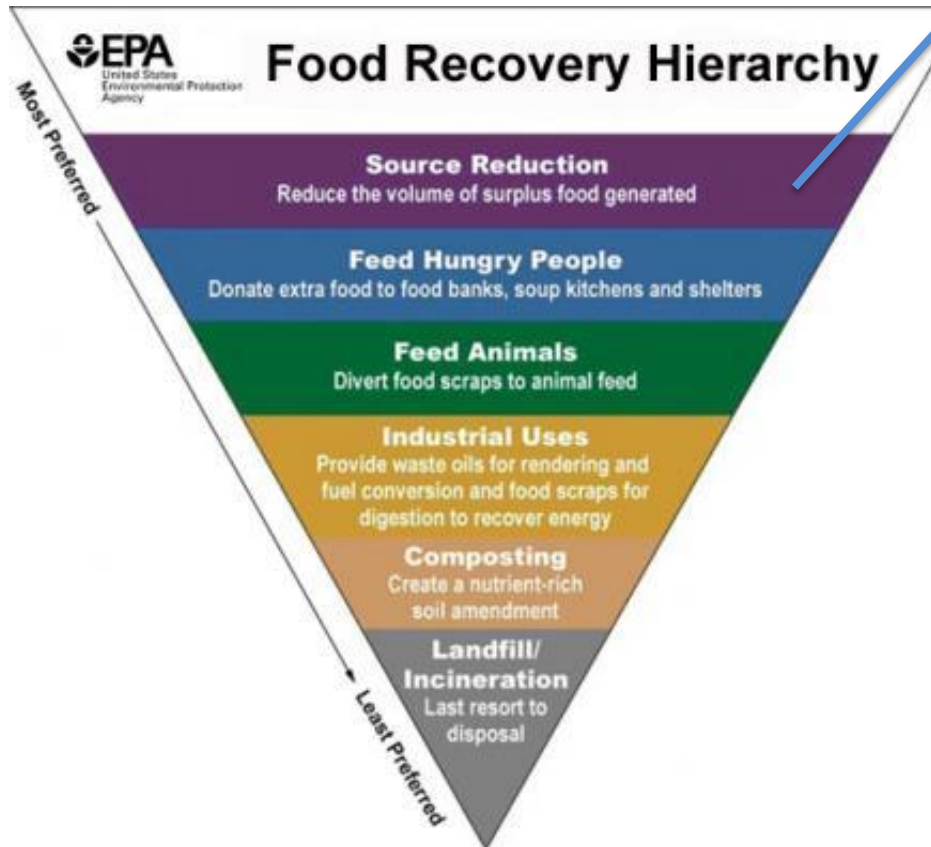
UN Environment calls countries and companies to action on Sustainable Development Goal Target 12.3:

*By 2030, halve per capita global food waste at the retail and consumer levels and reduce food losses along production and supply chains, including post-harvest losses.*

Executive Director Erik Solheim Co-Chairs **Champions 12.3**, a unique coalition of executives collaborating to accelerate progress on the delivery of this critical target.

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# Food Recovery Hierarchy



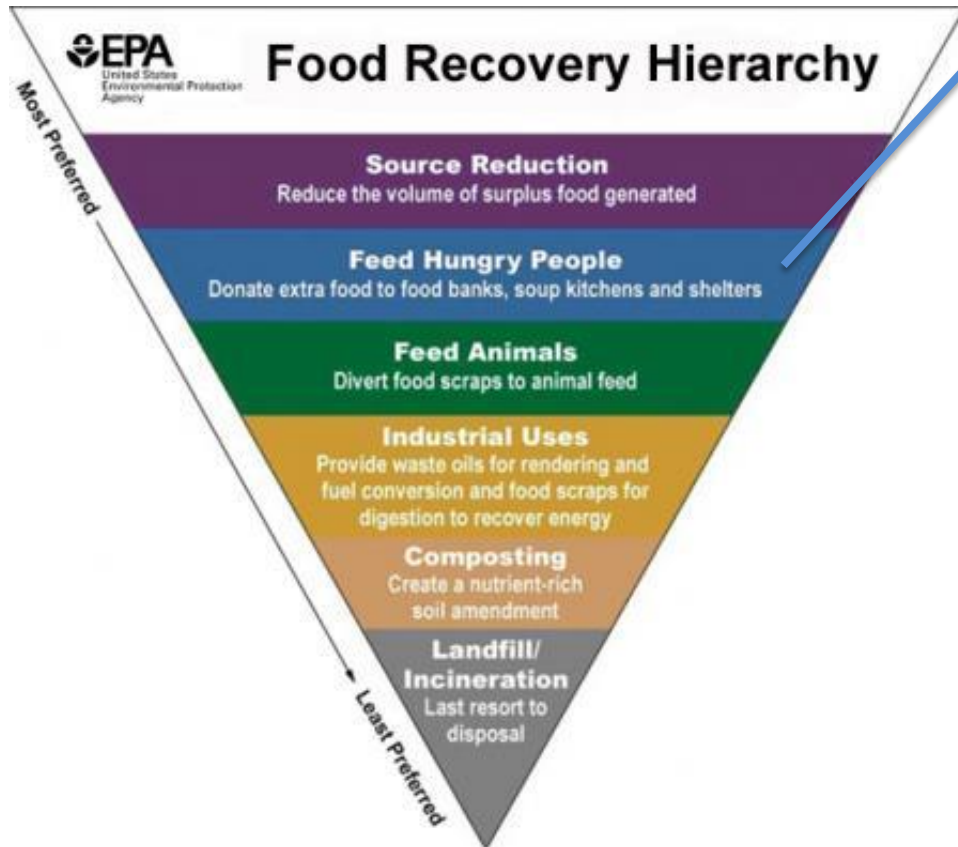
**1 Reduce** the best way to address food waste is not to create it in the first place. You should:

- Improve ordering and management of food inventory.
- Improve storage and transportation food.
- Develop informative data labeling of food
- Repurpose unsold food or sell at discount during off-peak hours

Source: U.S. Food Waste Challenge. USDA 2015.

# Food Recovery Hierarchy

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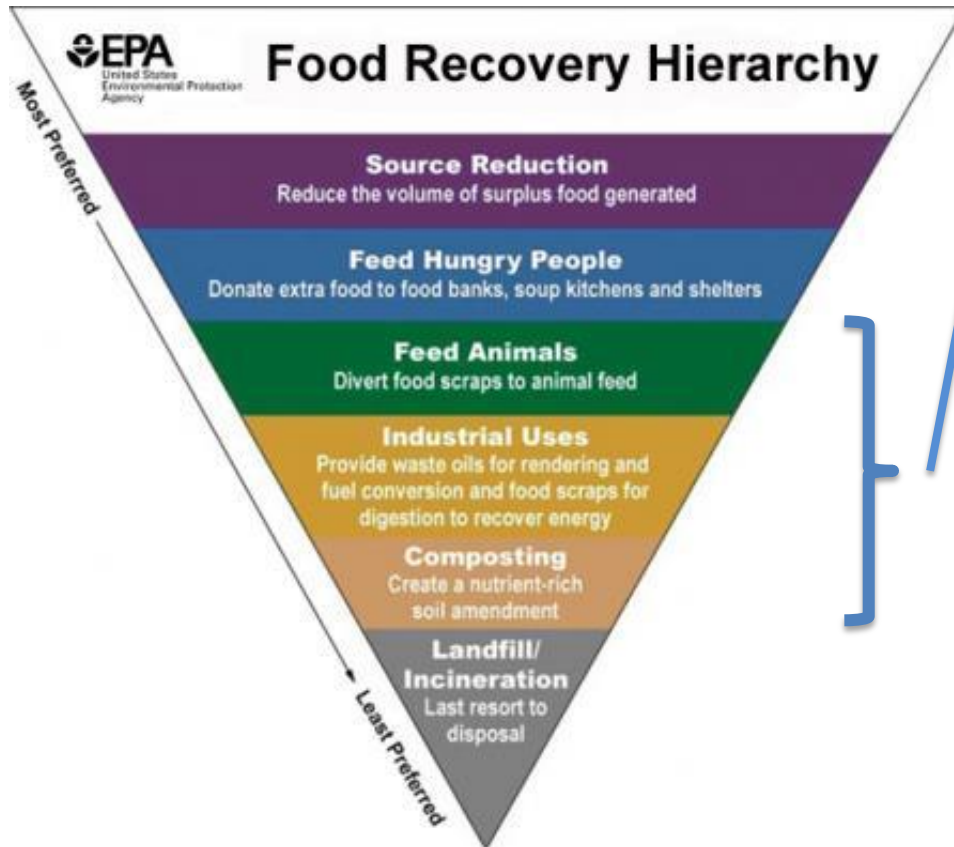
## 2 Recover

Donate wholesome unsold food to hunger-relief organizations so that they can feed people in need. There are many food recovery organizations that can help:

[www.usda.gov/oce/foodwaste](http://www.usda.gov/oce/foodwaste)

Source: U.S. Food Waste Challenge. USDA 2015.

# Food Recovery Hierarchy



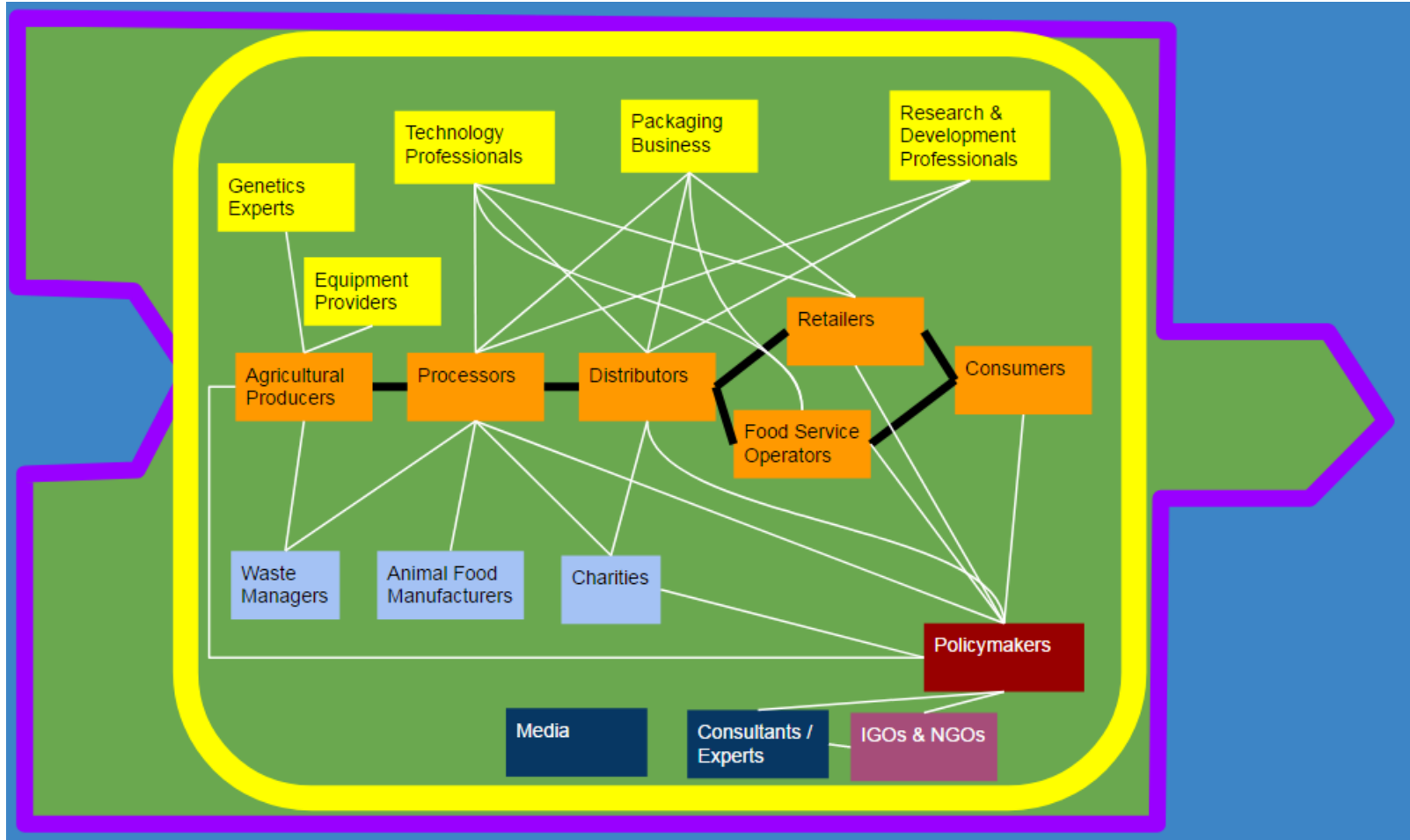
## 3 Recycle

Recycle food waste into other products, such as:

- Animal Feed
- Compost and worm castings
- Bioenergy (natural gas and electricity)
- Bioplastics
- Clothing

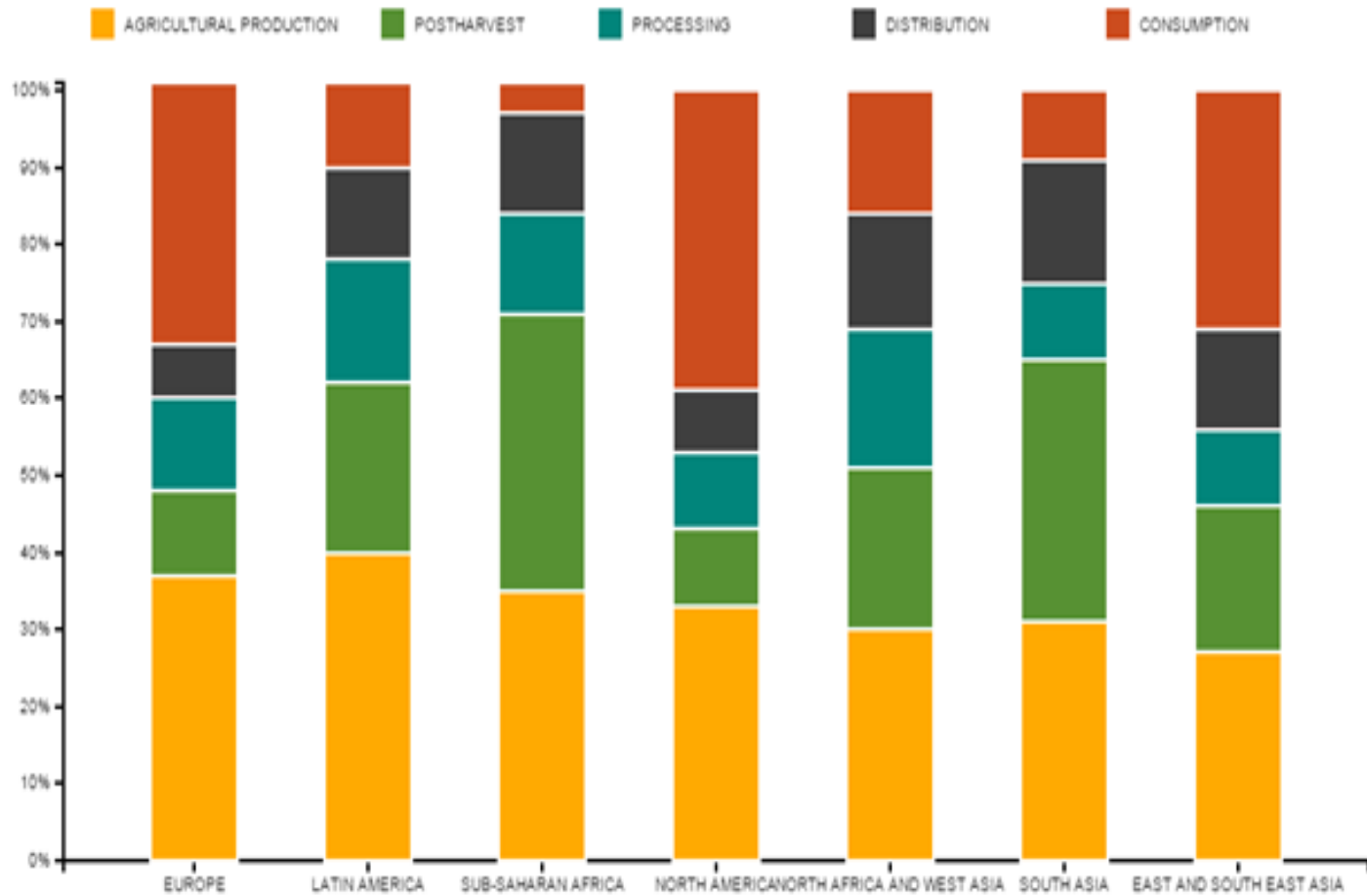
Source: U.S. Food Waste Challenge. USDA 2015.

# Systems Mapping of the Food Supply Chain and its Stakeholders



Source: Holness, 2017. UN Environment North America Office..

Relative food wastage, by region and by phase of the food supply chain.



SOURCE: UN FAO



# Where does Food Waste occur along the Supply Chain in the United States?

## FOOD WASTED BY WEIGHT — 63 MILLION TONS



## CONSUMER-FACING BUSINESSES INCLUDE



Source: ReFED 2016 / A Roadmap to Reduce U.S. Food Waste by 20%.

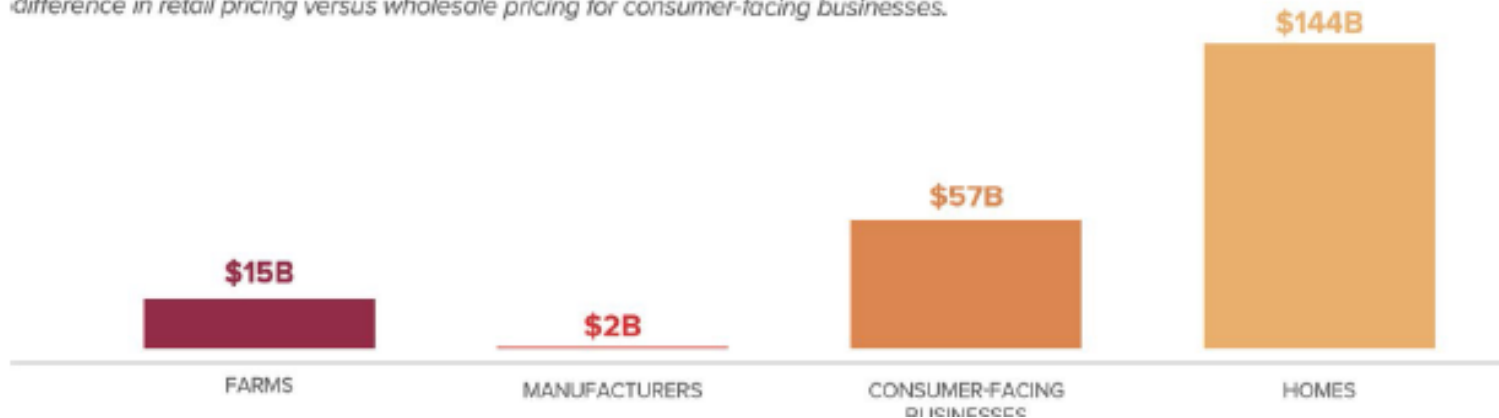
# What is the Economic Cost of Food Waste and Loss along the Supply Chain in the U.S.?

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## \$ 218 billion:

### VALUE OF WASTE — \$218 BILLION

*The financial cost of food waste ends up costing consumers the most due to the difference in retail pricing versus wholesale pricing for consumer-facing businesses.*

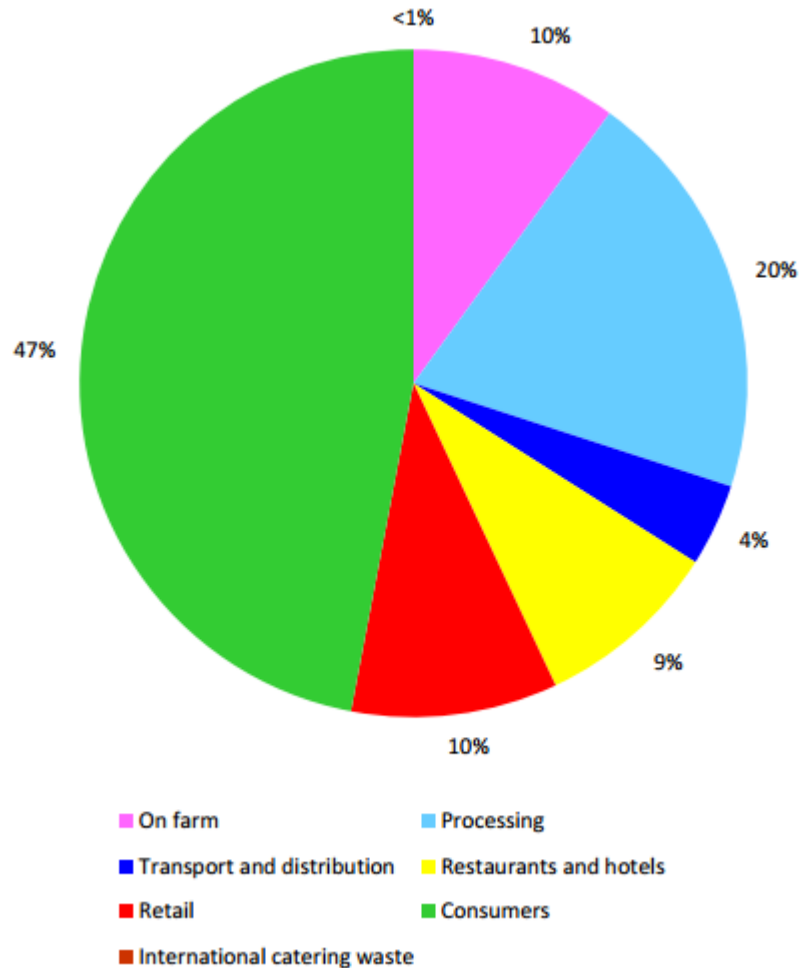


Source: ReFED 2016 / A Roadmap to Reduce U.S. Food Waste by 20%.

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# Where does Food Waste occur along the Supply Chain in the Canada?

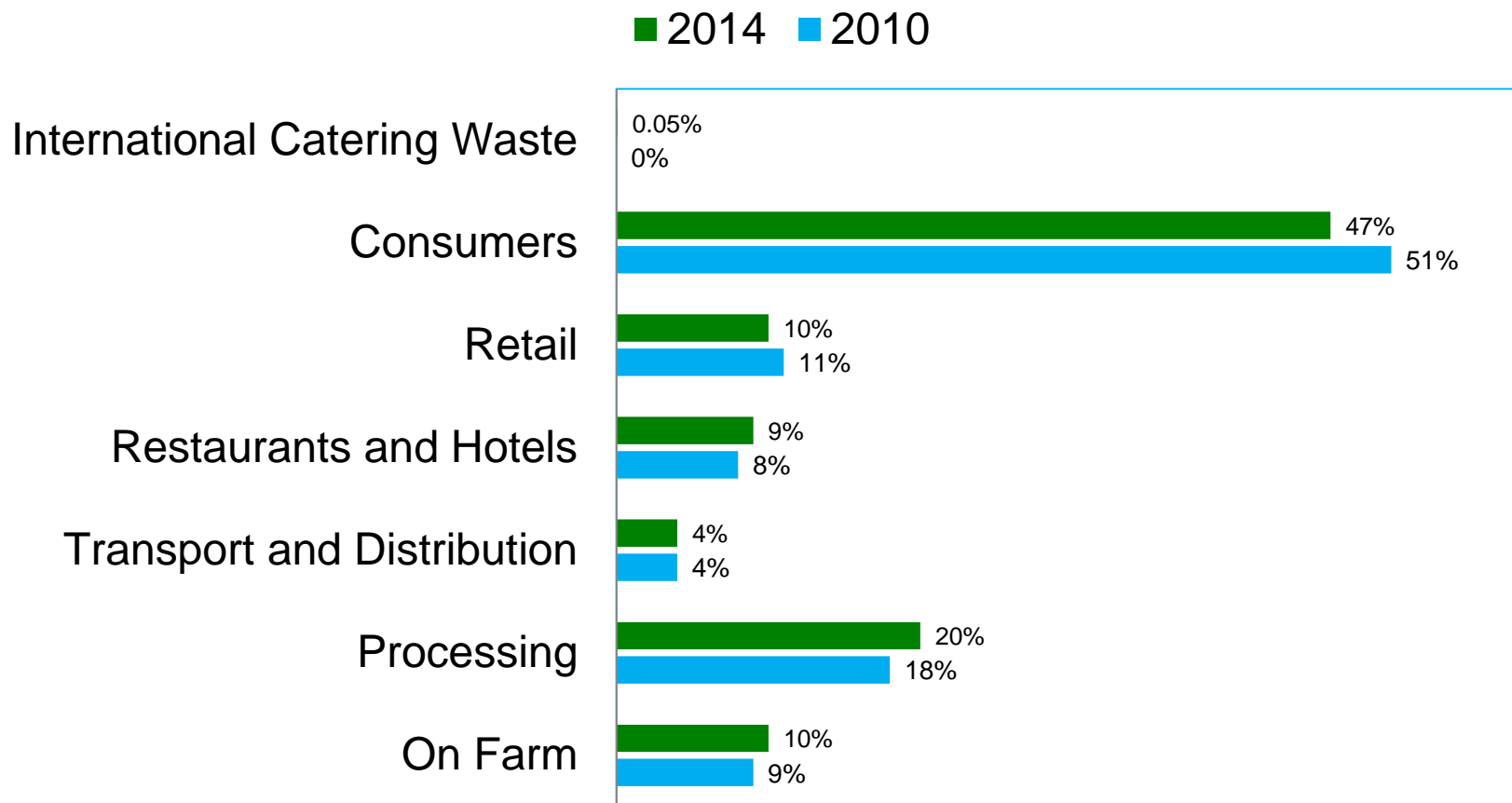
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Source: VCMi 2014/ "Food Waste in Canada - \$27 Billion Revisited"

# What is the Economic Cost of Food Waste and Loss along the Supply Chain in Canada?

**\$ 31 billion:**



Source: VCMi 2014 / "Food Waste in Canada - \$27 Billion Revisited"

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# Global Initiative on Food Loss and Waste Reduction



[www.fao.org/save-food](http://www.fao.org/save-food)

# Currently **900** registered partners - and growing – world-wide, public and private



# Four Components of Save Food:

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- 1 Awareness raising** on the impact of, and solutions for food loss and waste.
- 2 Collaboration** and coordination of world-wide initiatives on food loss and waste reduction.
- 3 Research to** policy, strategy and programme development for food loss and waste reduction.
- 4 Support to investment programmes and projects,** implemented by private and public sectors.

# A Global Response:

New research on cosmetic standards

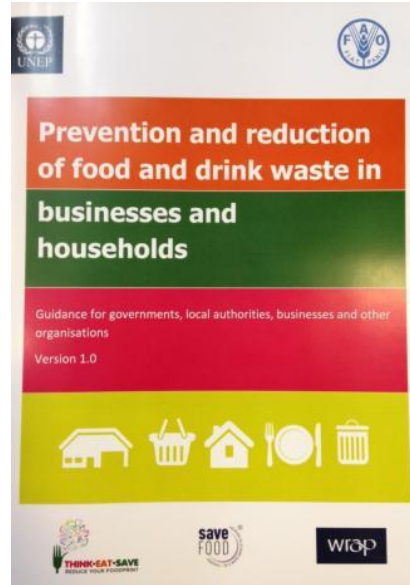
UN Environment's activities, together with FAO & SAVE FOOD, include:



**THINK·EAT·SAVE**  
**STUDENT**  
**CHALLENGE**

A Global Awareness Campaign

Food Waste Prevention Programmes at National & Local Level



Capacity Building on Food Waste at Regional Level

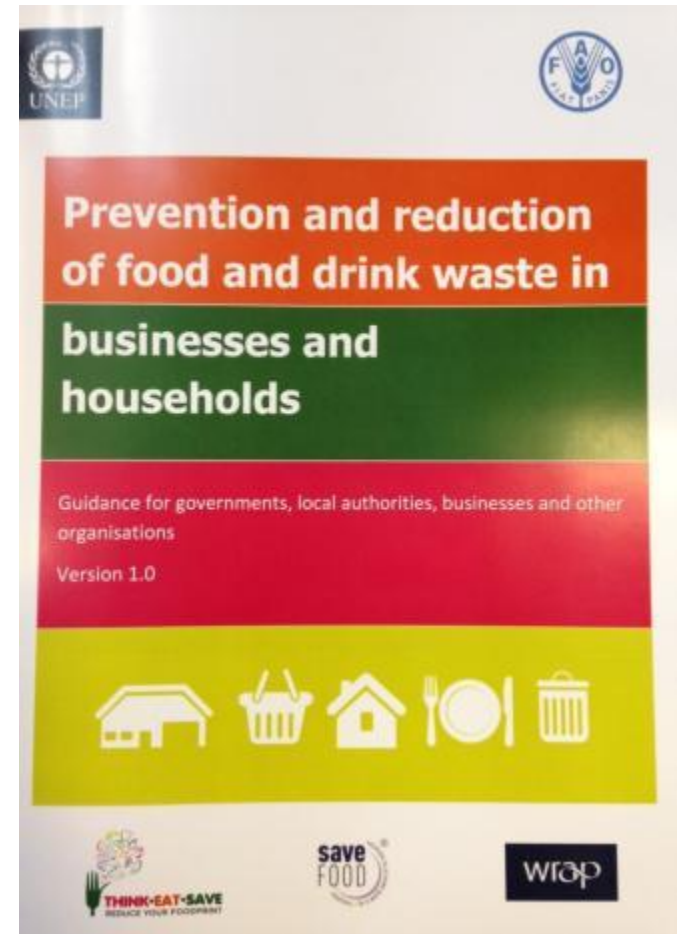




# Food Waste Prevention Programmes at National & Local Levels:

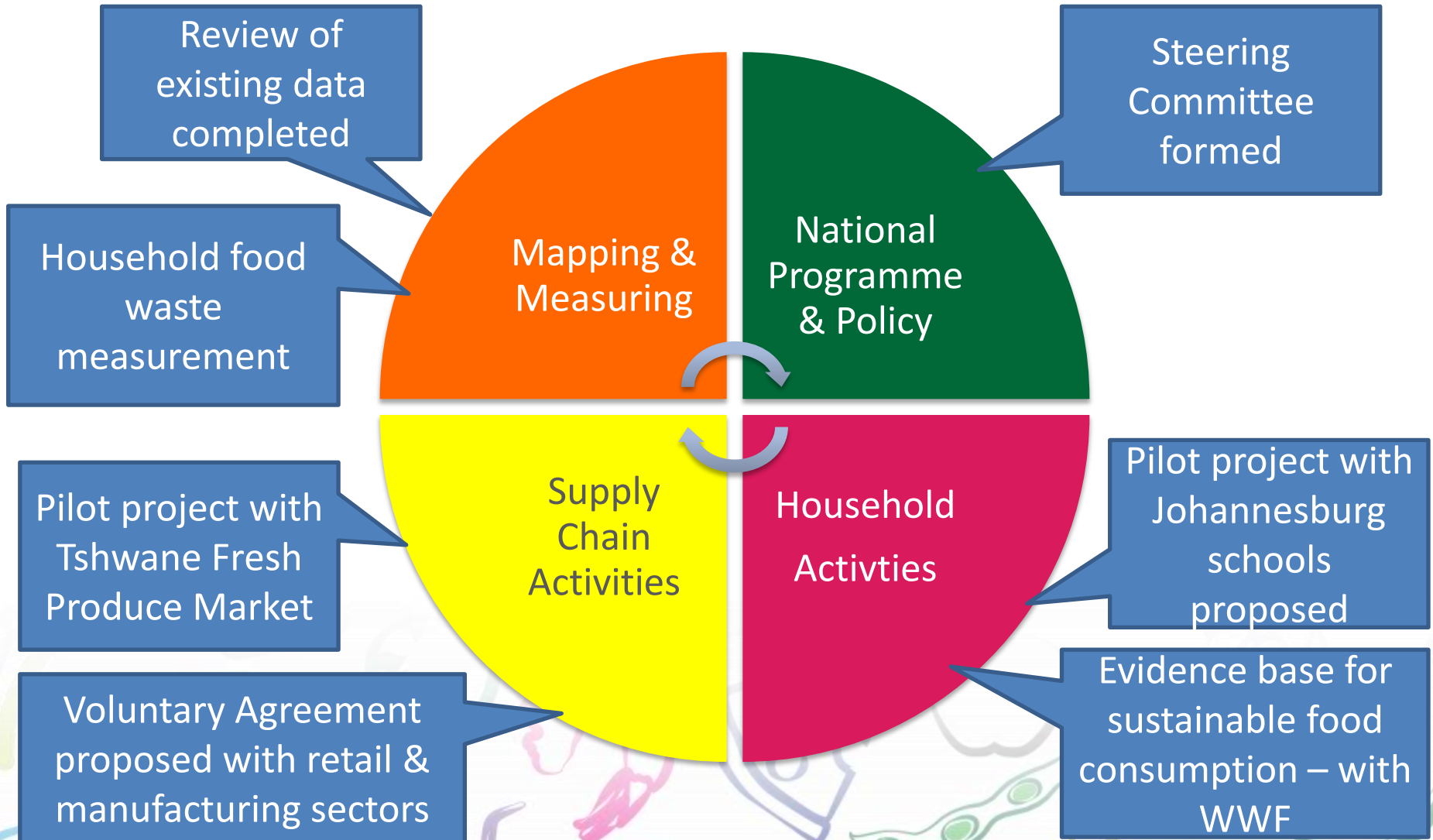
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- Guidance for public authorities, businesses and other organisations on **mapping, planning and delivering** effective food waste prevention strategy
- Published in **May 2014** and available at <http://thinkeatsave.org/index.php/take-action/think-eat-save-guidance-document>
- Guidance methodology being piloted with selected countries & companies worldwide





# South Africa Pilot: First Activities



- **Dedicated** to meeting Target 12.3
  - Contribute to the global achievement of Target 12.3.
  - Encourage others to pursue efforts to reduce food loss and waste.
- **Lead by example** on how to reduce food loss and waste
  - Quantify food loss and waste and monitor progress.
  - Pursue strategies to reduce food loss and waste.
- **Showcase** successes and communicate to peers and media the importance of food loss and waste reduction
  - Raise awareness amongst governments, the private sector, and citizens about the issue of food loss and waste, the benefits of addressing it, and how to do so.
  - Publicize and celebrate successes in reducing food loss and waste, thereby educating and motivating others.
- **Advocate** for improving the enabling conditions for reducing food loss and waste when engaging other leaders.

# Tracking Progress on Target 12.3

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UN Environment encourages countries and companies to **quantify their food loss and waste**, setting a baseline to track progress against towards 2030.



The FLW Protocol, published last June, provides a global standard for food loss and waste measurement.

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# Three Key Recommendations:

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Champions 12.3 provides three recommendations for meeting Target 12.3 by 2030:

**Target:** Targets set ambition, and ambition motivates action. Every country, major city and company involved in the food supply chain should set food loss and waste reduction targets consistent with Target 12.3 in order to ensure sufficient attention and focus.

**Measure:** What gets measured gets managed. Governments and companies should quantify and report on food loss and waste and monitor progress over time through 2030.

**Act:** Impact only occurs if people act. Governments, companies and civil society should accelerate and scale up adoption of policies, incentives, investment and practices that reduce food loss & waste.

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# Thank you!

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For further information:  
[www.thinkeatsave.org](http://www.thinkeatsave.org)  
<http://www.save-food.org/>

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[www.unep.org](http://www.unep.org)