Why and How to Measure Food Loss and Waste

Version 2.0

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What’s new in Version 2.0?

• Practical Guide Version 2.0
  • Updated, simplified guidance on your food loss and waste measurement journey
  • More detail on how to make the business case
  • More detail on how to “make the change” and convince colleagues to take action

• Business Cost Calculator
  • A new tool to help you see the potential savings of preventing food loss and waste

• Short Summary for Executives
  • Quick facts and tips to get your executive suite on board

• New Measurement and Prevention Case Studies
  • Eight great cases from businesses and organizations succeeding in measuring food loss and waste
Business Cost Calculator

- A downloadable Excel tool to help you develop a business case for your company or organization to reduce food loss and waste
- Calculates your cost of food loss and waste/day and the potential savings that could be realized by various reduction activities
- Available in English, Spanish and French
## Business Cost Calculator (cont.)

### FOOD LOSS AND WASTE BUSINESS CASE COST CALCULATOR

**KEY**
- Please complete grey cells
- Yellow cells are completed automatically

#### 1) Organization

<table>
<thead>
<tr>
<th>Organization name</th>
<th>(enter organization name)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organization type</td>
<td></td>
</tr>
<tr>
<td>Local currency</td>
<td>Mexican pesos</td>
</tr>
<tr>
<td>Unit of measurement</td>
<td>kilograms</td>
</tr>
</tbody>
</table>
## Business Cost Calculator (cont.)

### 2) FOOD LOSS AND WASTE (highlight a column heading to learn more)

<table>
<thead>
<tr>
<th>Food category e.g. &quot;All food&quot; or specific items such as &quot;Apples&quot;, &quot;Carrots&quot;, &quot;Peaches&quot; etc.</th>
<th>Estimated value of food (per selected unit)</th>
<th>Currency</th>
<th>Estimated amount lost or wasted per day (per selected unit)</th>
<th>Unit of measurement</th>
<th>Cost of FLW per day (in local currency)</th>
<th>% of total FLW (in economic value)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carrots</td>
<td>25.00</td>
<td>Mexican pesos</td>
<td>4.00</td>
<td>kilograms</td>
<td>100.00</td>
<td>8.51%</td>
</tr>
<tr>
<td>Peaches</td>
<td>75.00</td>
<td>Mexican pesos</td>
<td>3.00</td>
<td>kilograms</td>
<td>225.00</td>
<td>19.15%</td>
</tr>
<tr>
<td>Oranges</td>
<td>50.00</td>
<td>Mexican pesos</td>
<td>2.00</td>
<td>kilograms</td>
<td>100.00</td>
<td>8.51%</td>
</tr>
<tr>
<td>Flour</td>
<td>75.00</td>
<td>Mexican pesos</td>
<td>10.00</td>
<td>kilograms</td>
<td>750.00</td>
<td>63.83%</td>
</tr>
</tbody>
</table>

| Total                                                                                   | 225.00                                     | 19.00        | 1,175.00                                                     | 100.00%             |
### 3) PROPOSED SOLUTIONS TO REDUCE FLW AND RESULTS (highlight a column heading to learn more)

<table>
<thead>
<tr>
<th>Proposed Solutions</th>
<th>Cost of Solution</th>
<th>Currency</th>
<th>% of FLW affected by this solution (in economic value)</th>
<th>Estimated reduction in Food Loss and Waste, if known (%)</th>
<th>Food Loss and Waste reduced per year by mass/weight</th>
<th>Unit of measurement</th>
<th>Economic value of Food Loss and Waste reduced per year</th>
<th>Payback period (Years)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Smart Fridge</td>
<td>50,000.00</td>
<td>Mexican Peso</td>
<td>50.25%</td>
<td>30%</td>
<td>1,899.53</td>
<td>Kilograms</td>
<td>72,372.66</td>
<td>0.65</td>
</tr>
<tr>
<td>Employee Training</td>
<td>25,000.00</td>
<td>Mexican Peso</td>
<td>100.00%</td>
<td>75%</td>
<td>12,318.75</td>
<td>Kilograms</td>
<td>64,331.25</td>
<td>0.33</td>
</tr>
<tr>
<td>New Inventory Software</td>
<td>30,000.00</td>
<td>Mexican Peso</td>
<td>100.00%</td>
<td>5%</td>
<td>4,106.25</td>
<td>Kilograms</td>
<td>21,443.75</td>
<td>0.33</td>
</tr>
<tr>
<td>Total</td>
<td>95,000.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>30,283.58</td>
<td>158,147.68</td>
</tr>
</tbody>
</table>
Short Summary for Executives

• Makes the case why businesses should be tackling food loss and waste
• Distills the main points of the guide down to 2-3 slides to illustrate the opportunities associated with measuring and preventing food loss and waste
• Great for internal presentations and conversations as well as for explaining to others why your business is prioritizing food loss and waste prevention
• Available in English, Spanish and French
Food loss and waste – why and how it matters for your business

The North American economy wastes about $278 billion worth of food each year. That means your business can save money and operate more efficiently by cutting food waste in your operations.

Reducing food loss and waste can:

- **Save your business money**
- **Preserve natural resources**
- **Help feed those in need**

Measuring and reducing food loss and waste is good for business, people, and the planet – and it’s easier to do than you think.
### Food loss and waste – why and how it matters for your business

#### What are some common causes of food loss and waste within food businesses?
- Food is damaged or spoiled
- Equipment failure
- Portions too big
- Food expires before sale
- Inefficient manufacturing processes

#### What can my business do?
- Measure how much food waste is generated
- Identify the composition and causes of this food waste
- Estimate the amount of food waste that can be prevented
- Calculate the true cost of food waste to your business
- Identify and implement practical solutions to reduce food waste
- Track performance and savings in reducing food waste
- Continually improve over time

#### How will it help my business financially?
- Raw material costs for food and ingredients increase over time
- Profit margins in food production and sales are often thin
- Food that is lost or wasted instead of sold amounts to lost revenue, so reducing food loss and waste generates new income while also reducing disposal costs

#### What are the environmental benefits of reducing food loss and waste?
- Reduced greenhouse gas emissions
- Less land needed for landfills
- Lower consumption of resources, including energy and water

#### How will it help my business reputationally?
- Investors and customers are increasingly environmentally and socially conscious when choosing a business to support
- Preventing food waste optimizes operational efficiencies, which can attract investors and shareholders
- Communicating measures to reduce food loss and waste can help to build brand loyalty over time

#### How can I get started?
Check out the CEC guide “How and Why to Measure Food Loss and Waste” at the link below, and explore the case studies, tips, tools and other resources available to help you on your food loss and waste reduction journey.

Visit [www.cec.org/flwm](http://www.cec.org/flwm) to learn more!
Case Studies

- Real cases featuring businesses who are realizing the benefits of measuring and preventing food loss and waste
- Examples range from across the food supply chain, including businesses and nonprofits
- Gives detailed explanations of what worked for these companies and organizations, so that you can learn from them and implement their lessons into your own food loss and waste measurement and prevention efforts
Why and How to Measure Food Loss and Waste

Why and How to Measure Food Loss and Waste: A Practical Guide 2.0

This guide will walk you through seven steps for measuring food loss and waste (FLW) within your business, city, state, or country. Use our checklist to track your progress and easily access the most appropriate section.

The revised guide implements findings from focused testing with a diverse set of businesses and organizations across North America.

English: www.cec.org/flwm
Español: www.cec.org/flwm/es
Francais: www.cec.org/flwm/fr
Many Thanks

• CEC
• ECCC, EPA, SEMARNAT
• Our case study participants
• And everyone who provided guidance and input along the way!