The opportunity:

The greatest waste in the supply chain is food waste. Each year, about 1.2 billion tonnes of food is wasted globally. That's nearly half a kilo a day for every person on the planet.

Equally important, food waste is the third largest source of CO₂ emissions in the world.

This is a huge loss for Europe and the world, negatively impacting the millions of people who don’t get enough to eat each day as well as the environment.

The good news is that much of the food waste is preventable by using targeted solutions. You can reduce food going to landfills simply by switching from cardboard to reusable containers. You can lower product damage rates by handling food on higher quality pallets. You can bring in experts to help you identify gaps in your current processes where waste occurs. And, you can collaborate with your trading partners to re-distribute unsaleable products to those in need through our relationships with food banks.

Food waste is a fact of life today. But by understanding why it occurs and aggressively addressing those causes, we can work toward a future where there is enough food for everyone.

What we do:

The best way to get to the root cause of food waste is to find the weakest links in the supply chain.

Our food waste experts will review your supply chain to find those weak links. We’ll systematically evaluate all of your food handling processes, packaging components and material handling systems to figure out where the waste is happening. We’ll also examine logistics processes, environmental impacts and transportation.

Our team will then ensure a comprehensive evaluation. We’ll consider your product type, packaging, handling equipment, unit load configurations, geographic locations, seasonal fluctuations and much more. Then we’ll develop a Value Chain Map to help facilitate and coordinate collaboration with food banks so excess or damaged food is put to good use.

When the initial assessment is complete, we’ll work with you to implement a plan of action that will systematically address all of your food waste issues. Then we’ll measure results to

Using RPCs to reduce waste in the fresh supply chain

One of our customers converted to IFCO Reusable Plastic Containers (RPCs) for fresh produce and is seeing many notable benefits: better stock rotation and handling leading to less product waste going to landfills and improved cooling that delivers fresher product to retail. Plus, the retailer lowered CO₂ emissions by replacing one-way packaging with reusable solutions and used less water in the process.
Finding and eliminating the causes of food waste.

Food waste happens. We know where to find it and how to eliminate it.

<table>
<thead>
<tr>
<th>Handling</th>
<th>Unit Load Design &amp; Construction</th>
<th>Environment</th>
<th>Transportation</th>
<th>Automation</th>
<th>Packaging</th>
<th>Raw Materials</th>
</tr>
</thead>
<tbody>
<tr>
<td>Race cuts of consumer units when package is opened</td>
<td>Contamination</td>
<td>Temperature control failure</td>
<td>Poor road conditions</td>
<td>Misalignment of manufacturing equipment</td>
<td>Packaging too weak for specific supply chain conditions</td>
<td>Poor product demand forecasting</td>
</tr>
<tr>
<td>Excess consumer handling</td>
<td>Damaged shipping platforms</td>
<td>Debris in warehouse causing accidents</td>
<td>Poor truck or trailer suspension</td>
<td>Misalignment of palletizers on production lines</td>
<td>Malfunctioning automation</td>
<td>Product reformulations</td>
</tr>
<tr>
<td>Damage from handling equipment</td>
<td>Multi-stacked unit loads too high</td>
<td>Spoilage of slow-moving product</td>
<td>Insufficient dunnage</td>
<td>Malfunctioning automation</td>
<td>Packaging too weak for specific supply chain conditions</td>
<td>Spoilage, contamination</td>
</tr>
<tr>
<td>Lack of safety training</td>
<td>Stretch wrap issues</td>
<td>Temperature control failure</td>
<td>Poor road conditions</td>
<td>Malfunctioning automation</td>
<td>Packaging too weak for specific supply chain conditions</td>
<td>Spoilage, contamination</td>
</tr>
<tr>
<td>Rough handling in transport or storage</td>
<td>Misalignment of cases in stacks</td>
<td>Debris in warehouse causing accidents</td>
<td>Poor truck or trailer suspension</td>
<td>Malfunctioning automation</td>
<td>Packaging too weak for specific supply chain conditions</td>
<td>Spoilage, contamination</td>
</tr>
<tr>
<td>Disorganised back of store leads to misplaced products</td>
<td>Low coefficient of friction</td>
<td>Temperature control failure</td>
<td>Poor road conditions</td>
<td>Malfunctioning automation</td>
<td>Packaging too weak for specific supply chain conditions</td>
<td>Spoilage, contamination</td>
</tr>
<tr>
<td>Double handling in store</td>
<td>Product underhang on unit load</td>
<td>Temperature control failure</td>
<td>Poor road conditions</td>
<td>Malfunctioning automation</td>
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<tr>
<td>Order picking, especially mixed loads</td>
<td>Product overhang on unit load</td>
<td>Temperature control failure</td>
<td>Poor road conditions</td>
<td>Malfunctioning automation</td>
<td>Packaging too weak for specific supply chain conditions</td>
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<td>Air flow issues</td>
<td>Stretch wrap issues</td>
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<tr>
<td>Clamp equipment crushes boxes</td>
<td>Push-pull equipment tears boxes or bags</td>
<td>Temperature control failure</td>
<td>Poor road conditions</td>
<td>Malfunctioning automation</td>
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<tr>
<td>Forklift/pallet jack driver error; unit load collision</td>
<td>推拉设备撕裂箱或袋</td>
<td>温度控制失效</td>
<td>路况差</td>
<td>自动化设备故障</td>
<td>包装太弱无法满足供应链条件</td>
<td>食物变质，污染</td>
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We are committed to reducing the human, environmental, operational and financial impact of food waste.

Enactus. We’ve joined with several of our biggest CPG and retail clients in supporting Enactus, an international Non-Governmental Organisation dedicated to inspiring students to improve the world through entrepreneurial action. Enactus works with leaders in business and higher education to mobilise university students to make a difference in their communities while developing the skills to become socially responsible business leaders.

Consumer Goods Forum. We support the Consumer Goods Forum in its effort to halve the amount of food wasted at its 400 retailer and manufacturer members by 2025.

When supply chains share and reuse CHEP platforms, higher quality platforms become economically feasible. The sharing and reuse of higher quality platforms reduce product damage and improves the health of our planet, which improves the world’s ability to grow and share food.

What our customers achieve each year through the sharing and reuse of CHEP platforms:

- 3,000 less tonnes of food is damaged during transport.
- 630,000 tonnes of CO₂ are taken out of the atmosphere.
- 1.38 million trees are saved for the planet.
- 420,000 tonnes of trash never makes it to landfills.

We work with food banks in Europe that collect and channel more than 400,000 tons of food per year, equaling 2.2 million meals that feed 5.9 million people.

Ways we support food banks:
- Asset use – We provide platforms and containers to move product to food banks.
- Volunteering – Our associates spend thousands of hours each year supporting food banks.
- Donations – We make direct monetary and product contributions to food banks.
- Transport and supply chain collaboration – Our logistics experts lend their skills to optimise operations at food banks.
- Ambassadors – We promote food bank support with customers and trade associations.

FEBA. European Federation of Food Banks is the largest food bank organisation in Europe, covering 23 countries, more than 250 food banks and helping almost 6 million Europeans every year.

FEBA has a mission to fight food waste through a call for solidarity. Its focus on generating a viable and efficient network is completely aligned with our business model and Better Communities strategy.

CHEP has signed a three year collaboration agreement with FEBA to become ambassadors and support their mission to reduce food waste and help the most needy.

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How you’ll benefit:
- We have visibility into all segments of the supply chain and expertise across your organisation, plus decades of experience. We’ll help you:
  + Better understand the link between efficiency and environmental impact
  + Gain a holistic view of your enterprise
  + Reduce food waste and lower disposal costs
  + Identify hot spots where product damage is happening
  + Get detailed information on the performance of unit loads
  + Bolster your Corporate Social Responsibility efforts by donating excess or damaged product to food banks

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Global Good: Food isn’t the only thing wasted when it’s not consumed. There is lost packaging, energy, water, soil and man-hours. We’ll work with you to reduce this waste, by optimising the processing, storage, handling and merchandising of your products. It’s all part of our Better Planet initiative, as we work to minimise waste in the supply chain.
Food Waste Reduction.
Just one of many Consumer Goods Solutions from CHEP.

If you’re looking to improve your supply chain, let’s talk.

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