


Chillventa Specialist Forums 2022
Chillventa Fachforen 2022

**CONNECTING
EXPERTS.**



**FOOD SAFETY and
EFFICIENCY
with CONNECTED ASSETS**




Energy Efficiency 

Improve the Energy Efficiency through the entire Cold Chain.

Food Safety, Reduce Loss & Waste 

Ensure the freshness of food from harvest and processing to transportation and distribution, while maintaining compliance with legislative requirements at every stage.

Connectivity 

Collecting more and more data is becoming a critical requirement for any cold chain application.



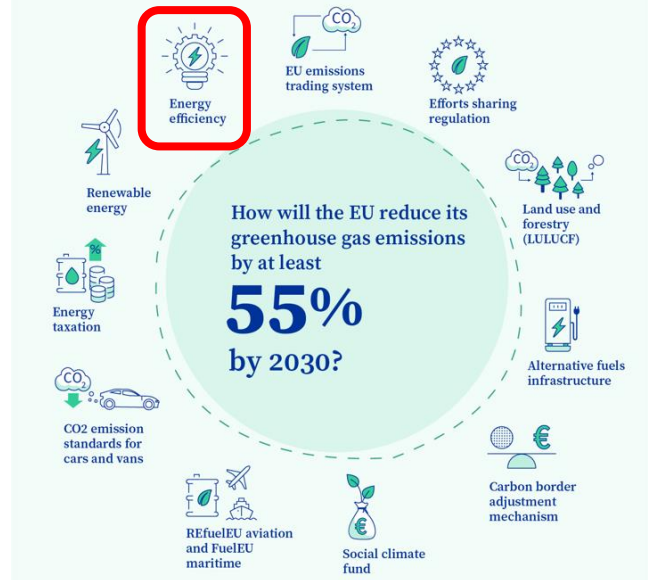
A big effort from EU institutions, towards a more sustainable World, is involving both Energy Efficiency activities and Food Loss and Waste countermeasures.

Cold Chain & Energy Efficiency

- **Cold chain climate footprint** strongly depends on the energy efficiency.
- **Lots of innovations** are involving remote control and predictive maintenance, with the target to optimize the energy consumptions of installation / appliances.
- **Technology migration** towards new and optimized solutions for cold chain are the keystones to improve energy efficiency as well as preserving the food quality.
- **EU regulation** is pushing for improving energy efficiency. All cold chain actors must help this transition.

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Fit for 55: how the EU will turn climate goals into law



Council of the European Union
General Secretariat

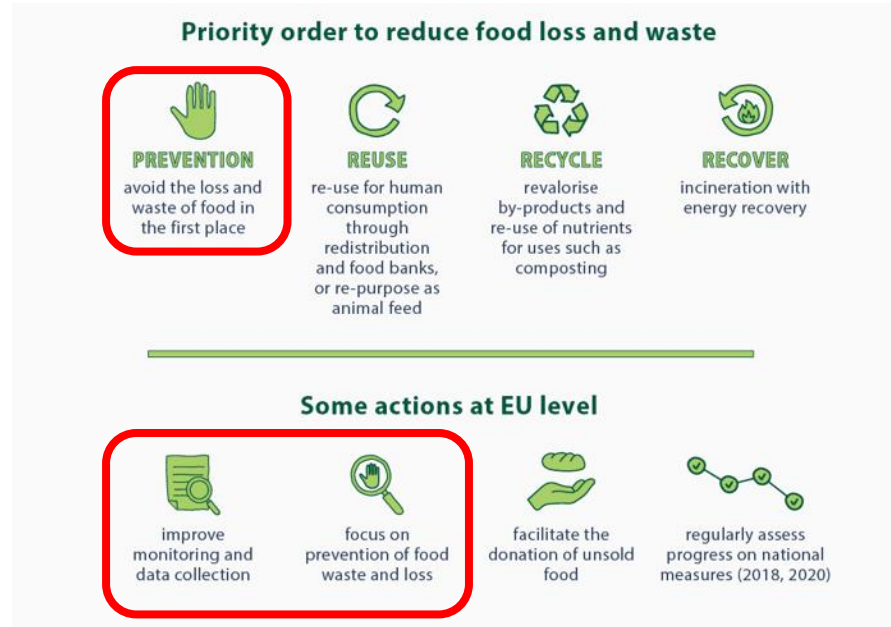
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Main sources of food loss and food waste

- Processing, food service and primary production are responsible for about **42%** of food loss and food waste.
- Every action able to increase the **shelf life** of food will help to **reduce losses**.

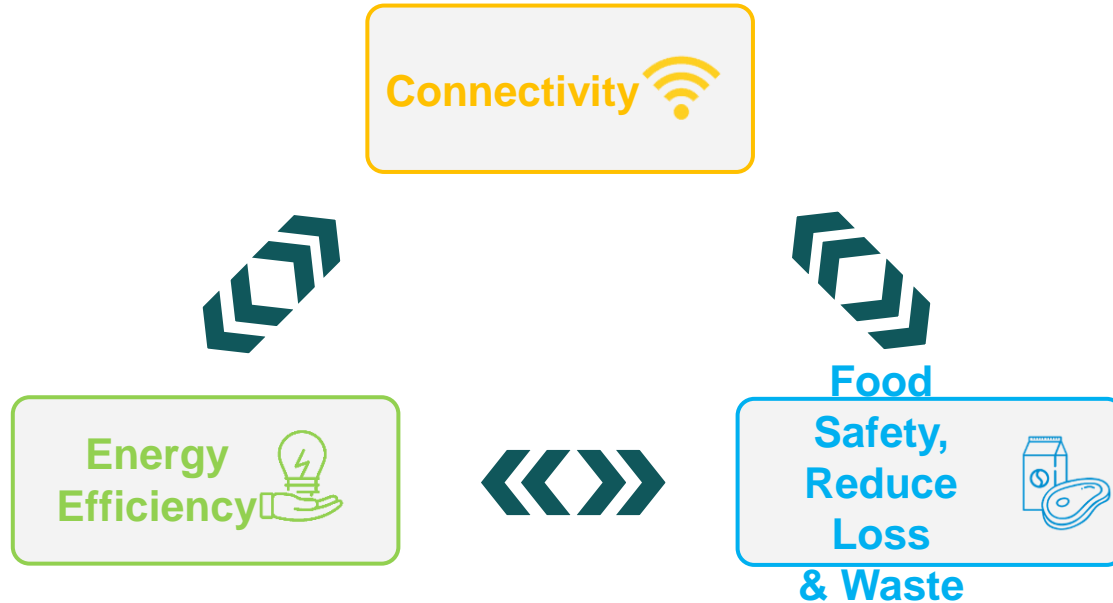


- As the **products are evolving**, the market is getting more and more interested in having lots of information coming from every single installation.
- It's time to start using massively **monitoring** and data collection to act on all sources of **food loss**.
- Near real time **alerts**, coming from single installation, can help to **reduce off-time** and relative **food waste** (due to, for example, cooling system failure and **food preservation** temperature out of control).
- We must start thinking a **renewed** cold chain, where every single installation / application, also the simplest one, is **continuously monitored**.



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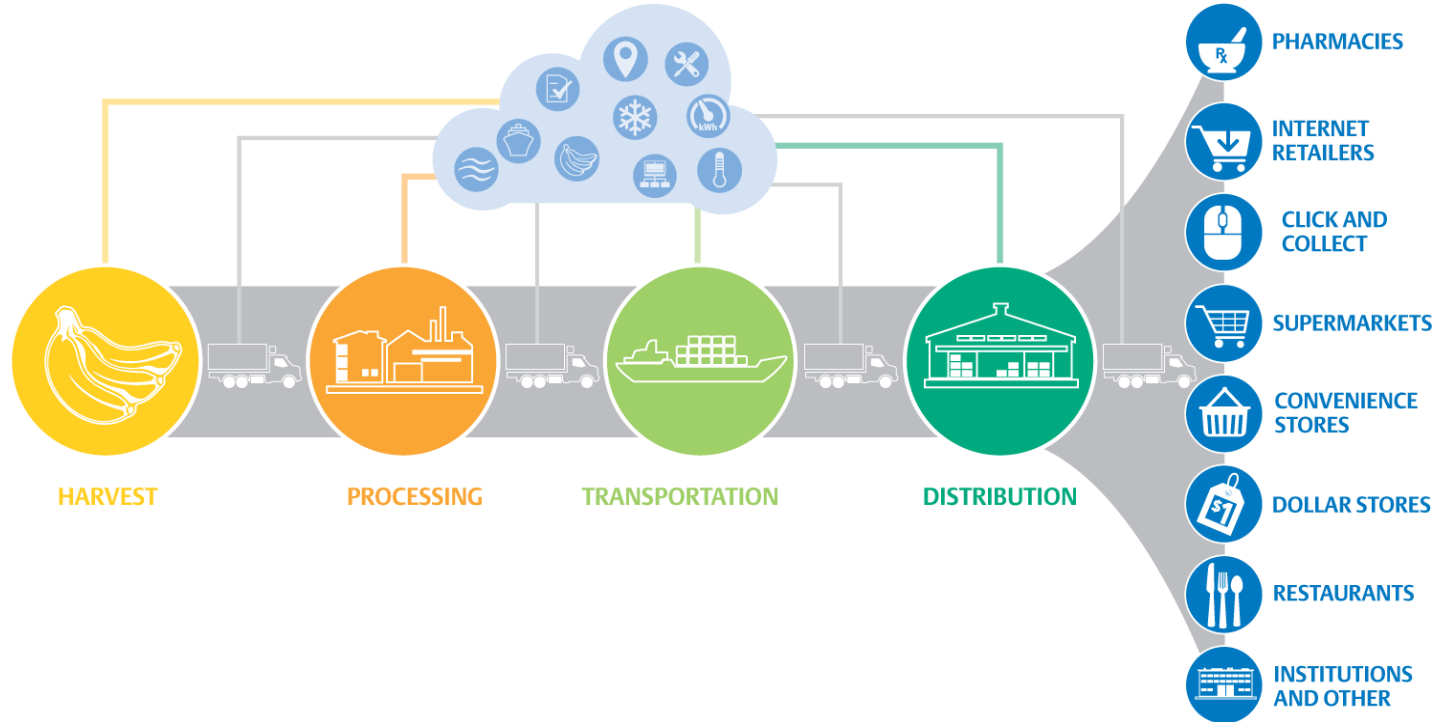
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We must start thinking to a **renewed cold chain**, where **every single installation / application**, also the simpler one, is continuously monitored.

How Can Emerson Be Part of This?

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Today Emerson can provide a reliable solution for the entire cold chain
FS.Da.Ma. addresses the needs of **Food Service** and **Commercial Refrigeration**



Food Service Data Management Cloud

- **Optimized food preservation solution for:**
 - Ho.Re.Ca.
 - Ice-cream & pastry
 - Farm food shops
 - Small food stores
- **Simple cloud solution:**
 - **Responsive design** to be used from any handheld device or PC
 - No post-configuration is required. **No skilled person** or complicated procedure to connect your application or the cloud portal
 - **Less than 10 minutes** to configure and display your data online

Food Service Data Management Cloud Architecture

1. Cloud portal



<https://dama.emersonconnected.com>

2. IoT Gateway



3. Controller network



➔ more models in the next future...

Energy saving



Consumption and waste reduction through to the work condition analysis and the enhancement of the installation performance.

Optimal preservation



FS.Da.Ma. allows **data to be saved for 1 year per each connected device** (temperature, alarms, and more) ensuring compliance with all international regulations of food safety (HACCP standards). During the valid licensing period, all data of connected devices can be exported in electronic format for consultation or for storage.

Food safety



Precise temperature regulation, event visualization and alarm management ensure the best quality for fresh and frozen food.

Remote control



Quick and easy access to all information you need thanks to the remote control and the simple interaction with the single units on the field; it is possible to **modify remotely all parameters** through a modern and easy to use interface.

Cyber security



FS.Da.Ma. is continuously monitored with the goal to **avoid possible interruptions caused by cyber-threats**.

Optimized maintenance



The remote analysis of the plant allows **reduction in maintenance costs** thanks to the advanced alarm management and preventive identification of critical working conditions.

Optimized visualization for mobile devices



The portal pages, developed with **responsive technology**, provide an excellent display of information, independently of the type of device used (right image, text dimension and object positioning).



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For more information about our solutions and expert insights, check out Emerson's website:

<https://climate.emerson.com/en-gb/brands/dixell>

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