

DON'T WASTE  
YOUR COLD.

AKO

e

LAW OF CONSERVATION OF ENERGY

Energy is neither **CREATED** nor **DESTROYED**; it can only be **TRANSFORMED** from one form to another or transferred from one system to another.



## 1. Cold Chain Efficiency: **PROBLEM, NEEDS & FACTS**

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Adequate food preservation along with an increase in energy efficiency

People security

A changing industry looking for emissions reduction and environmental care

But Fresh & Frozen food = More **ENERGY CONSUMPTION**, more **RISKS** on losing the quality of the products, more stress on your installation.

# 1. Cold Chain Efficiency: **PROBLEM, NEEDS & FACTS**

What are the **MAIN PAIN POINTS** for supermarkets during the process of keeping our food fresh and saving energy?

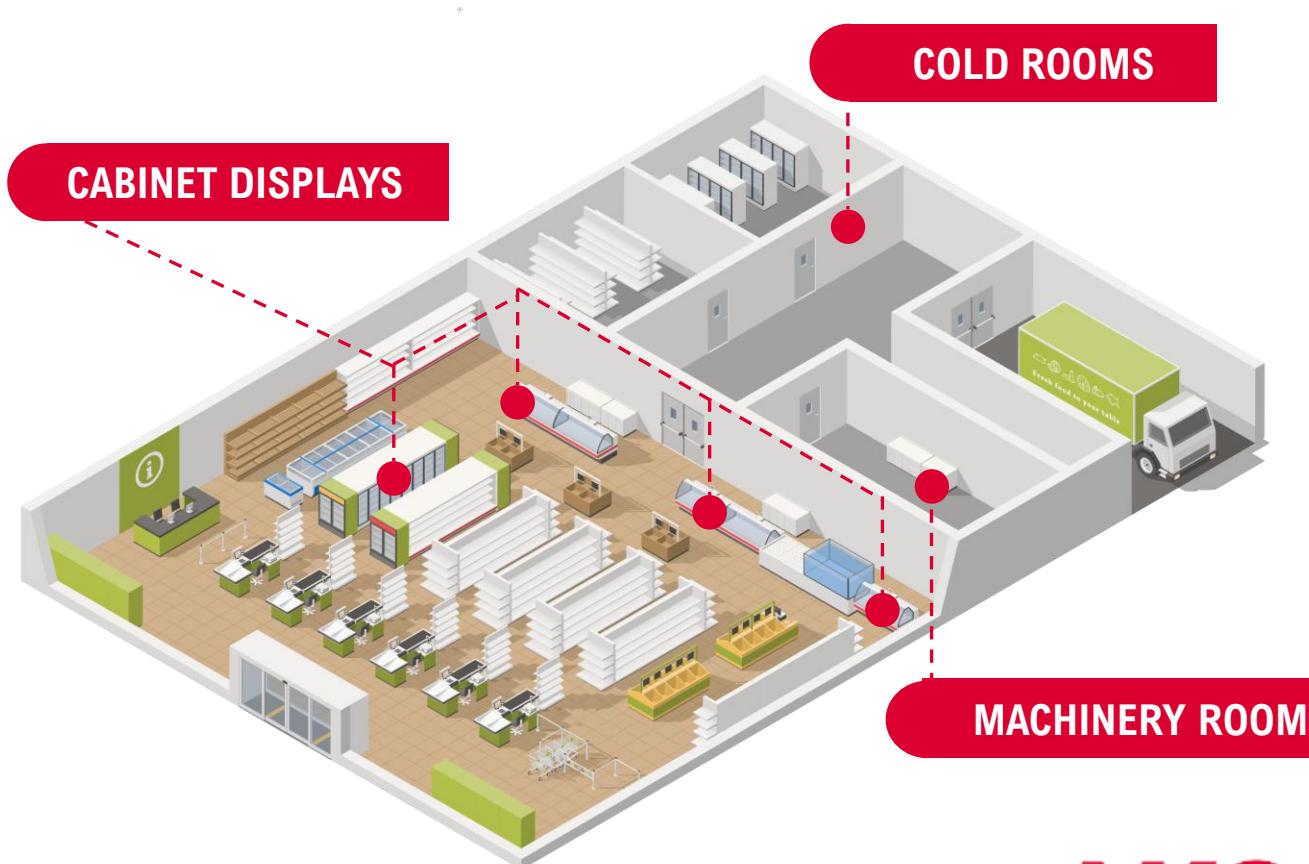
**ADEQUATE TEMPERATURE CONTROL**

**DATA MONITORING**

**CABINET DISPLAYS**

**COLD ROOMS**

**MACHINERY ROOM**



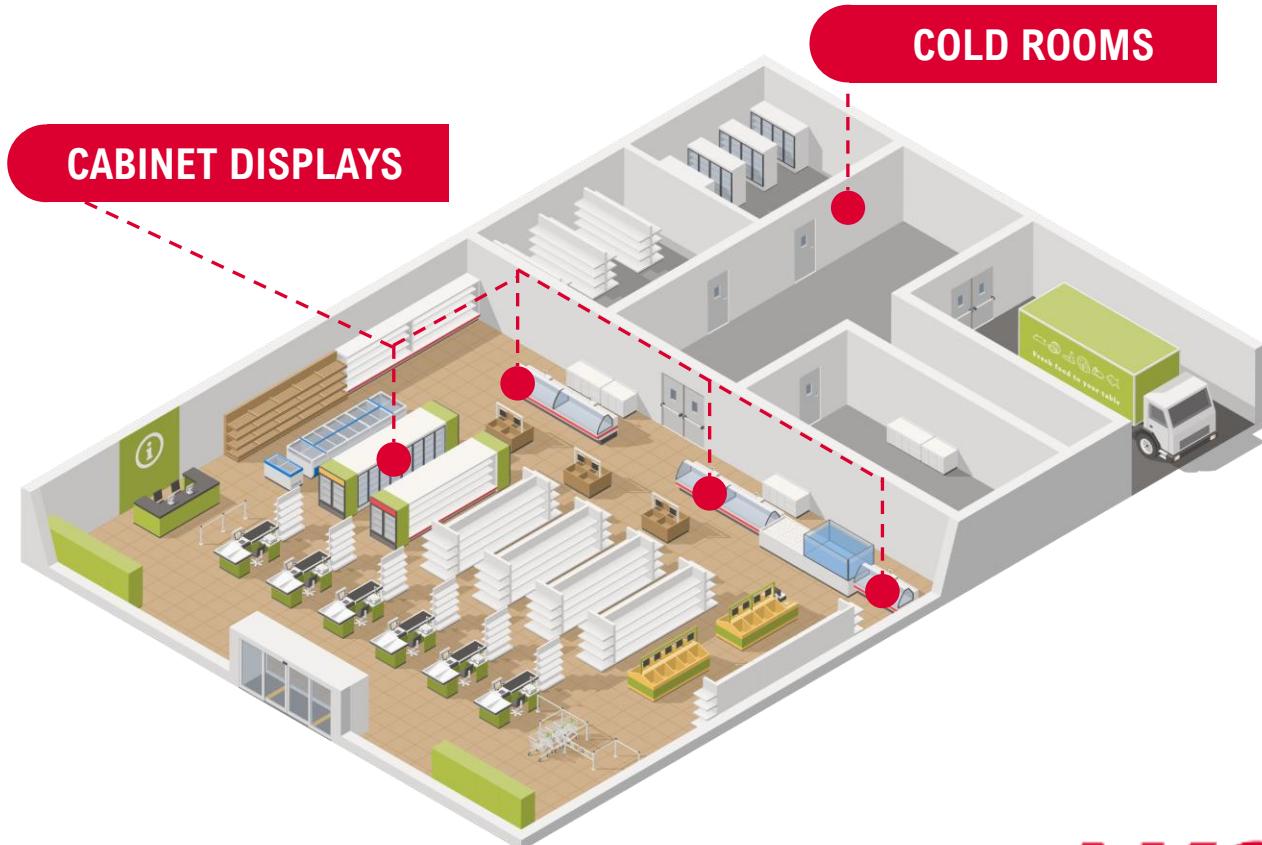
# 1. The Food Retail Industry: **PROBLEM, NEEDS & FACTS**

What are the **MAIN PAIN POINTS** for supermarkets during the process of keeping our food fresh and Good?

## REFRIGERATION

- It is an important energy consumer of the food preservation market (cold chain).
- Supermarkets spend from 40% to 60% of their total energy requirement on refrigeration.

## DEFROST



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What are the **MAIN PAIN POINTS** for supermarkets during the process of keeping our food fresh and Good?

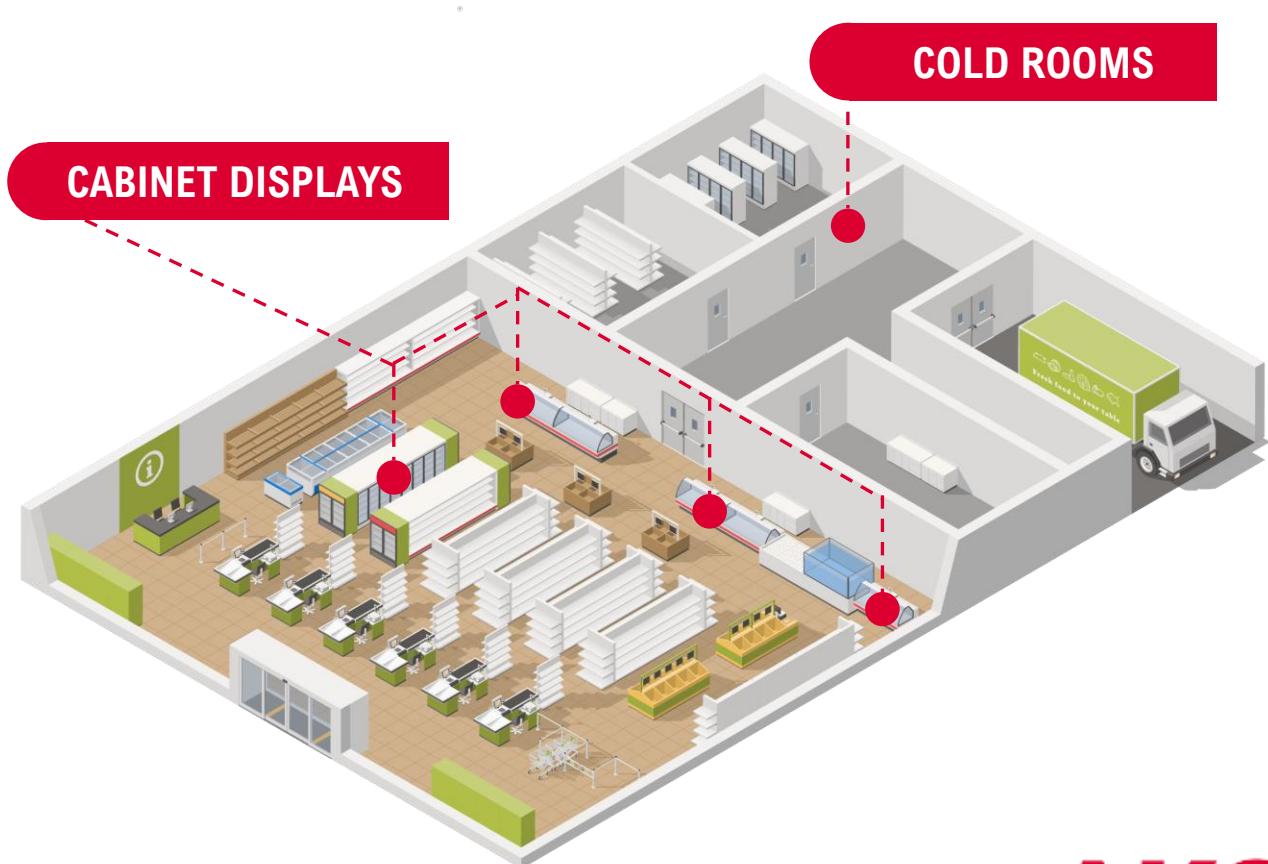
## REFRIGERATION

## DEFROST

- One of the main problems in cold-rooms is the frost built-up on evaporators, which causes heat transfer efficiency decreases or even blockage.

## CABINET DISPLAYS

## COLD ROOMS



# 1. The Food Retail Industry: **PROBLEM, NEEDS & FACTS**

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For a moment, let's focus on a critical component of the preservation of our products and a huge amount of energy consumption.

# 1. The Food Retail Industry: **PROBLEM, NEEDS & FACTS**

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## COLD ROOMS ARE CRUCIAL IN COMMERCIAL REFRIGERATION:

To Preserve Food Quality  
Operating Expenses Generator



UP TO 9%

OF PRODUCT SPOILAGE DUE TO LACK OF APPROPRIATE STORAGE TEMPERATURE

13%

OUT OF THE TOTAL ENERGY CONSUMPTION OF A SUPERMARKET

10-15%

AFTER SALES INTERVENTION ASSOCIATED WITH THE ADJUSTMENT OF PARAMETERS FOR COLD ROOM USE CHANGE OR TAMPERING

## 2. The Food Retail Industry: **SOLUTIONS**

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How do we optimize the cold room refrigeration performance?



Increasing  
Energy Efficiency

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How do we optimize the cold room refrigeration performance?



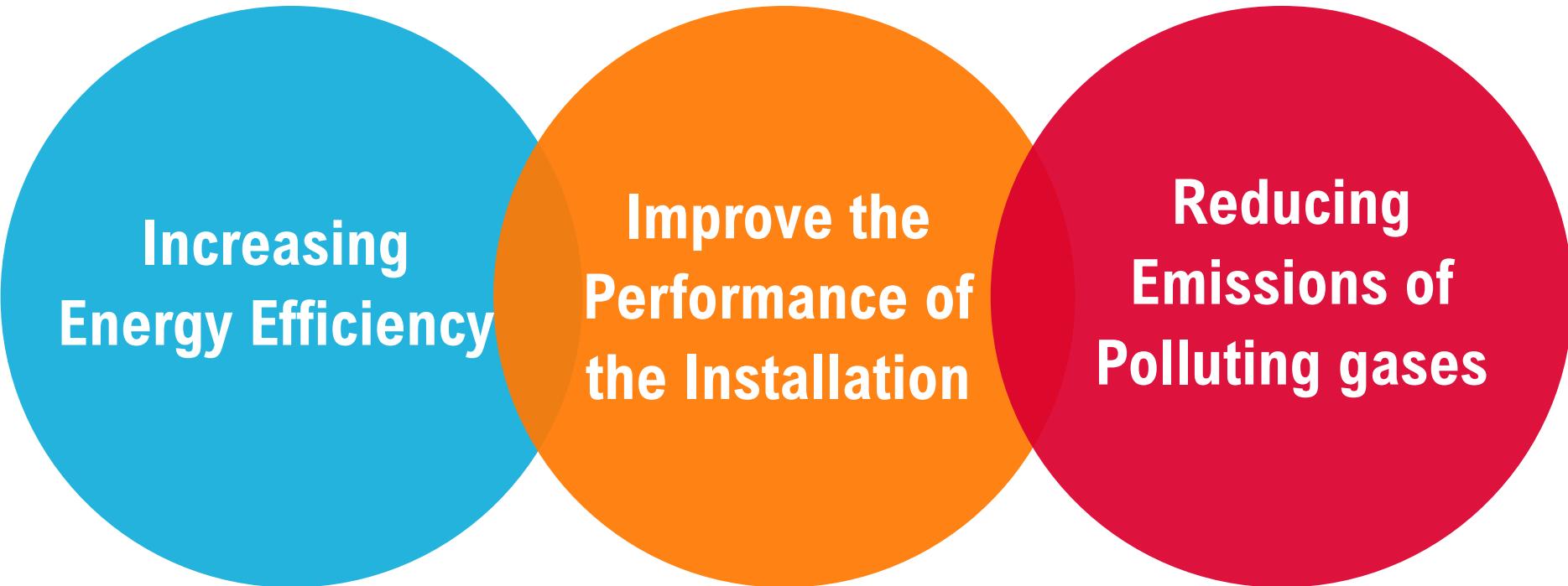
Increasing  
Energy Efficiency

Improve the  
Performance of  
the Installation

## 2. The Food Retail Industry: **SOLUTIONS**

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How do we optimize the cold room refrigeration performance?



Increasing  
Energy Efficiency

Improve the  
Performance of  
the Installation

Reducing  
Emissions of  
Polluting gases

## 5. AKO Group: OUR MISION

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Design, manufacturing, and commercialization of electronic equipment and connected solutions for:

**The control & monitoring of the cold chain and the improvement of the efficiency in the refrigeration facilities of the Industrial refrigeration, commercial refrigeration, and refrigerated transport sectors.**

**Providing valuable information for the customer.**

# 5. AKO Group: OUR WORLD

## Key figures



20mill€

Turnover  
2018

40%

Engineers on  
staff

8.000m<sub>2</sub>

Factory in Spain



+70

Countries with  
operations

12%

Turnover  
invested in R&D

+300

Global clients

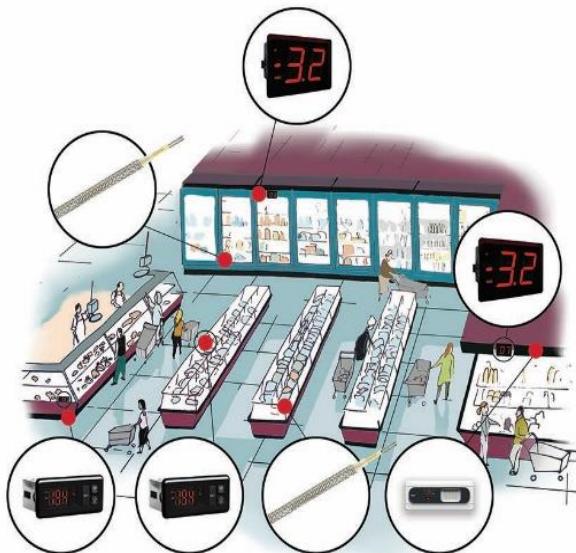
+40

Years of  
experience

- Technological and innovative manufacturer:
- 85% technical and/or senior engineers
- 15% doctors of engineering
- Official recognition by the Spanish Government as an Innovative SME
- 3 patents pending related to new ranges

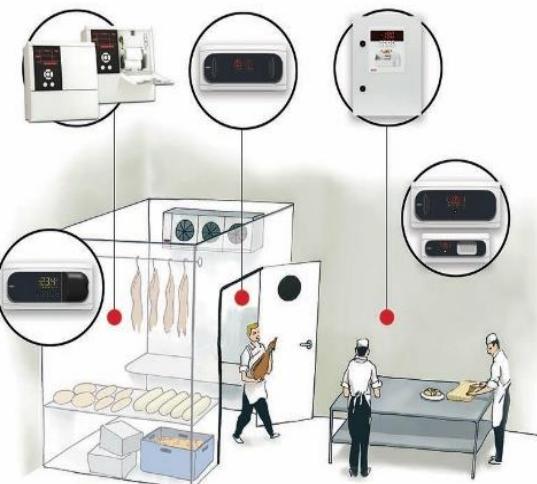
## 5. AKO Group: OUR ACTIVITIES

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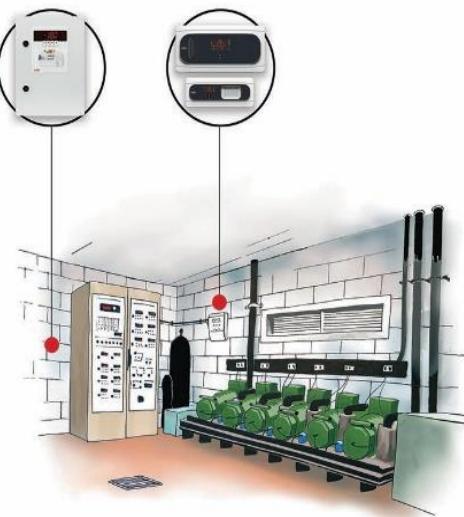
SELLING ZONE

FOOD SAFETY



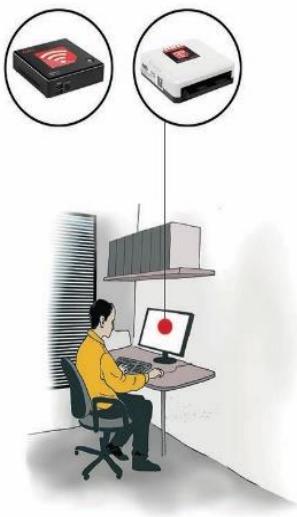
STORAGE ROOM

EFFICIENT CONTROL OF  
COLD ROOMS, COOLD  
DISPLAY CABINETS...



ENGINE ROOM

EARLY DETECTION OF GAS  
LEAKAGES



CONTROL ROOM

# 5. AKO Group: OUR PRODUCTS

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YOUR COLD.

November 2019, PLACE.  
NAME & LASTNAME  
POSITION  
XXXX@ako.com

AKO