

# COOLING SECTORS PROFILES

## European Vending Sector



Refrigerated vending machines are commercial refrigerated cabinets designed to accept consumer payments or tokens to dispense chilled products without on-site labour intervention.

Vending machines can sell almost any foodstuff: fruit, packaged snacks, confectionery, dairy products, sandwiches, drinks in bottles, cans and tetra packs, complete meal dishes, ice cream and frozen foods. With the exception of certain fruits, foodstuffs sold in vending machines are customarily contained within packaging. Most products are packed in a factory but some, such as meal dishes, may be wrapped in plastic film after preparation in a kitchen.

### THE SECTOR IN NUMBERS

**85.000**

IS THE NUMBER  
OF PEOPLE  
EMPLOYED DIRECTLY  
BY THE THE VENDING  
INDUSTRY

**1,5 MIL**

IS THE NUMBER OF  
REFRIGERATED  
VENDING MACHINES  
IN EUROPE

### SECTOR'S PROGRESSION

The market is expected to grow somewhat in the coming years – after years of stagnation or decline – due to improved economic conditions across Europe, and increased trends and demands for convenient snack options. Indeed, vending machines are used most often by consumers for their convenience, often being the only or closest 'shop' open and available.



## COOLING IN THE VENDING INDUSTRY

The cooling needs for vending machines vary depending on the products which are required to be cooled:

Products that need to be kept chilled to inhibit bacterial growth (i.e. meal dishes or dairy products) are cooled at 3°C.

Products that do not support bacterial growth and can be kept at room temperature, but their quality suffers if the temperature is allowed to rise too high, are usually maintained at a temperature of around 12°C

Some manufacturers of carbonated drinks believe that their products are best consumed at a low temperature, i.e 3 - 5 °C for quality reasons.

Frozen vending machines, which represent only 200-300 units sold per year, go down to approximately -15-20°C.

"cooling in vending is required to 1) Ensure hygienic and safe products and  
2) Ensure products are served at a desirable temperature"



## CHALLENGES

The new EU F Gas Regulation 517/2014 will impose some challenges for the cooling systems of European vending machines. The current cooling systems extensively use either HFC r404a or HFC r134a as the refrigerant, which will be prohibited by 2020 and 2022 respectively. The industry is still examining which alternative refrigerant to use – CO<sub>2</sub>, despite the high pressures required, seems to be currently preferred due to the flammability of hydrocarbons and the expensive safety measures required to eliminate risks (such as sparks) related to the motors contained in a vending machine.

Information kindly provided by EVA ([www.vending-europe.eu](http://www.vending-europe.eu))

The European Vending Association (EVA) is a not-for-profit organisation established and situated in Brussels since 1994. It represents the interests of the European vending and coffee service industry vis-à-vis the European Institutions and other relevant authorities or bodies. Its membership is composed of national associations and individual companies across Europe. The EVA represents all segments of the coffee service, water dispenser and vending industry: machine and component manufacturers, suppliers of commodities (coffee, ingredients, snacks, cold drinks, cups etc.), and operators.