Implications of the Eickhout draft report on the food safety

BRUSSELS, MARCH 2013

BACKGROUND

The phase out of ODS due on January 1st 2015 (Regulation 2037/2000 and modified by Regulation 1005/2009) has led operators of cold stores to consider alternatives for their existing installations as early as the year 2000.

Regulatory and/or technical circumstances did not always allow for so-called natural refrigerants such as ammonia or CO2 to be used.

The regulation of ammonia in certain member states such as the Netherlands and France made it very difficult to implement this refrigerant. These national regulations were not amended until 2004 for the Netherlands and 2009 for France.

Operators who were either anticipating their obligations of moving from ODS, or who were building new refrigeration systems could only choose HFCs such as HFC 404-A for the production of negative temperatures.

PRACTICAL IMPLICATIONS

Converting an existing refrigeration system implies building a second system in parallel to the existing one to avoid suspending activity during the conversion. In cold stores, this is particularly true as

➔Our activity is year-round

➔The foodstuffs stored cannot be withdrawn from temperature controlled environments

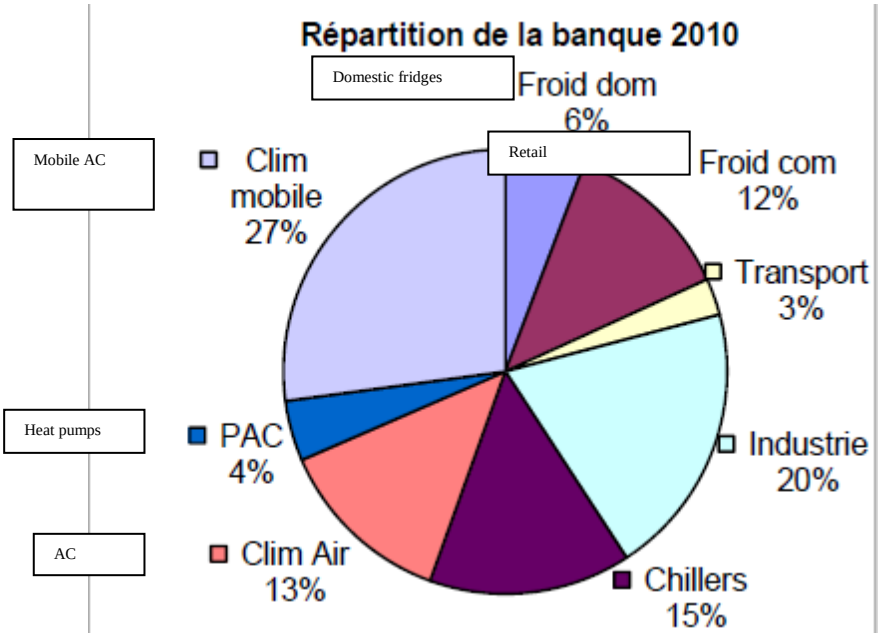
➔New storage space would be needed for the several tons or thousands of pallets of goods being stored – the occupation rate now is 85-90%

➔Bringing a building back to negative temperatures requires a minimum 3-week time frame to allow the gradual cooling of the floor to prevent brutal temperature contrast with the ground and breakage of the floor.

Converting existing HCFC installations to ammonia and/or CO2 is not always possible due to the compatibility of piping and metal parts (ammonia is very corrosive and incompatible with copper which is traditionally used for HCFC-R22) or the pressure put on joints and valves in the case of CO2.

In Holland, for example, out of 102 companies 45 still use R22 and more than 50 companies use R404a or R507. In France, approximately 25 % of the entire food industry (for production, cold storage to industrial manufacturing) still use HCFCs for refrigeration (the 2010 bank is of roughly 60 000 tons of refrigerants of which HCFCS represent 15 %, HFCs = 70 % and natural refrigerants = 10 %).

Below find the split between all uses in France.



Considering the average life span of industrial refrigeration plants (25-30 years), they are amortized over a period of 20 years minimum. For companies who have gone through a similar conversion it will not be possible to rebuild their cold stores before 2015. Apart from a lack in technical capacity no bank is currently willing to finance such an investment.

The cost of converting an existing installation from an HCFC to either ammonia or CO2 can add up to 1 year's turnover, depending on the size of the installations, the investment would be between € 1.000.000 for a medium sized Cold Store (15.000 pallet places) and € 7.500.000 for a big Cold Store (100.000 pallet places).

MAIN CONCERNS FOR OUR INDUSRTY

SERVICE BAN

The information above means that cold stores were built using HCFCs as late as 1999 and that HFC cold stores were built as early as 2000. The former have sometimes already been converted to HFCs usually HFC-404A for negative temperatures.

ECSLA supports preventing the use of HFCs in the case of new refrigeration equipment as in line with the objective of limiting global warming, provided alternatives exist at reasonable cost and are available at industrial level by more than one supplier to avoid monopolistic positions.

CONSEQUENCES OF ADOPTING THE BAN

If access for maintenance were not possible, the risk could be that

➔Operators will continue to operate their equipment less efficiently, leading to higher energy consumptions and/or lower quality refrigeration which could impact the quality of the food chain

➔Operators could be lead to close down suddenly leading to the loss of jobs in the food industry, to disturbances of the food industry where certain production points could disappear or foodstuffs could no longer be stored.

To prevent this from happening, ECSLA pleads for being able to maintain existing installations until the end of their economic life but at least until 2030.

Given that HFCs may have been used either to convert or to build industrial refrigeration equipment as late as 2012 and taking into account the amortization period,

ACCESS TO THE REFRIGERANTS NECESSARY FOR THEIR MAINTENANCE MUST BE POSSIBLE FOR AT LEAST 25 YEARS I.E. UNTIL 2037

PHASE DOWN SCHEDULE

Although ECSLA welcomes the change of baseline suggested for the phase down, the schedule suggested by the Rapporteur **threatens the proper maintenance of existing installations**.

A sudden reduction of the quantities of refrigerants available on the market (-17% as early as 2016) with an objective of – 84 % by 2030 may lead to

➔Illegal stocks in anticipation of shortages or
➔Illegal trading

Both practices which are in complete opposition to the objective of the regulation.

ECLSA supports reducing the quantities of GHG being placed on the market but the technical constraints developed above imply that such a reduction should take place according to a slower schedule.

This chart details the timeline recommended by ECSLA

PHASE DOWN OF PLACING ON THE MARKET			
	PROPOSITION FROM THE COMMISSION	**PROPOSITION FROM THE RAPPORTEUR**	**ECSLA RECOMMENDATION**
2015	100 %	100 %	100 %
2016 – 2017	93 %	83 %	100 %
2018 – 2020	63 %	63 %	100 %
2021 – 2023	45 %	45 %	90 %
2024 – 2026	31 %	25 %	70 %
2027 – 2029	24 %	19 %	50 %
2030 – 2032	21 %	16 %	30 %
2033 - 2040			20 %

ECSLA
European Cold Storage and Logistics Association

IMPLEMENTING A MAXIMUM LEAKAGE RATE

Although implementing a maximum leakage rate sounds tempting and an answer to the overall objective of reducing emissions, it presents several major drawbacks and flaws.

Refrigerant uses are numerous (fixed or mobile air conditioning, fixed or mobile refrigeration, industrial refrigeration) and temperature ranges are all different. To presume that a universal leakage rate can be applied to all applications is a mistake and could lead to imposing unrealistic and unattainable objectives to certain sectors. In addition, it is very important to **differentiate leaks due to poor maintenance** and **yearly consumption** under standard circumstances.

Certain refrigerants and HFCs in particular, due to their physical and chemical constitution have a natural tendency to leak. Molecules are very small, joints are under pressure which prevents them from being completely leak-free and distribution networks are of various lengths. These consumption rates don't take into account accidents which can occur although very rarely.

ECSLA questions the basis on which the Commission should establish an acceptable maximum leakage rate? Can the same leakage rate be imposed to all applications and to all refrigerants?

Who should determine this maximum leakage rate?

- Installers who could be tempted to state a very low, unattainable leakage rate thereby making sure they are called upon very often to check installations and to charge their services?
- Operators who might be tempted to declare leak rates different from reality?

➔**ECSLA supports the obligation to regularly check installations for leaks and to forbid recharging until such time as leaks are fixed. Such obligation seems the most efficient means to limit green house gas emissions.**