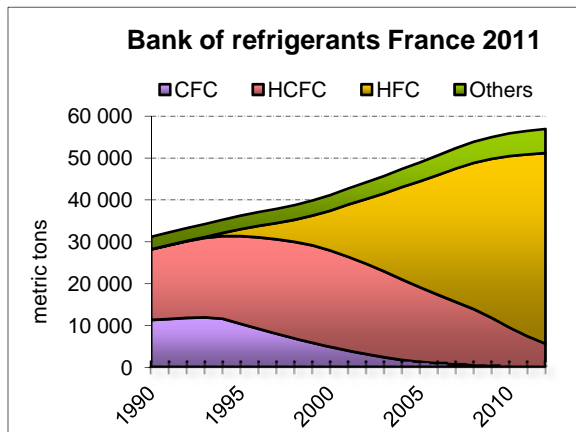


Refrigerants bank analysis - France 2011

Analysis based on the French Refrigerant Inventory for the year 2011, published in Nov 2012.



	Total Bank	France 2011	
CFC	R-11	0	78
	R-12	78	
HCFC	R-22	7 196	7 388
	R-408A	137	
	R-401A	56	
HFC	R-134a	22 805	43 429
	R-404A	7 171	
	R-407C	5 213	
	R-410A	6 769	
	R-507	422	
	R-417A and other transition blends	1 049	
Autres	R-600a	1 465	5 612
	R-290	1	
	R-717	4 102	
	R-744	44	
Total (metric tons)		56 507	

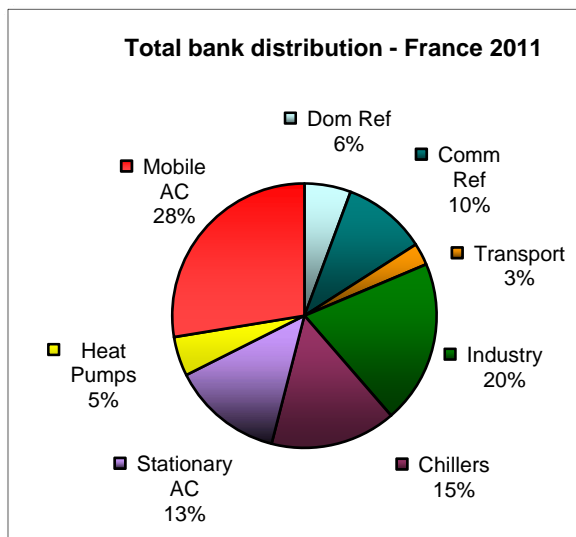
The total refrigerant bank in France in 2011 is estimated at 56 500 tons. It grew at about 1% p.a. until 2011. 40% of the bank is represented by HFC-134a. R-404A and HCFC-22 banks are significant, with more than 7 000 tons each. The HCFC bank is decreasing, due to end-of-life and retrofit of equipment. It represents no more than 13% of the total bank for France in 2011.

The HFC bank is about 43 000 tons.

The bank of refrigerants is currently dominated by HFCs. The highest bank is the HFC-134a one with more than 22 000 tons.

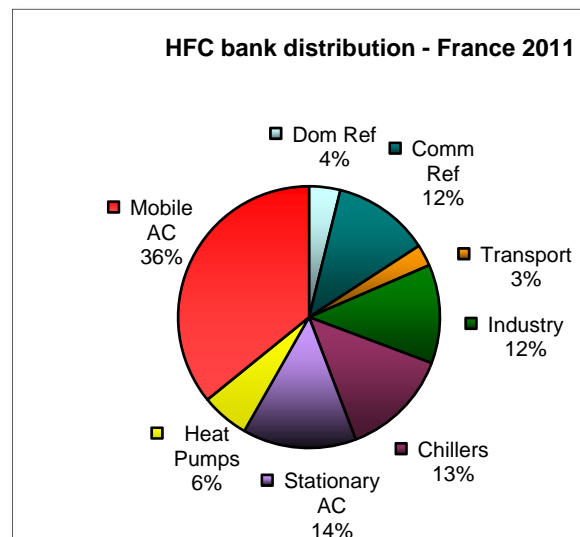
HCFC quantities in the installed base of equipment are decreasing because of end-of-life and retrofit of equipment but it still remains about 7 400 tons.

R-404A and R-410A banks have the same order of magnitude, around 7 000 tons. They respectively represent 13% and 12% of the total bank of refrigerants in France.



The Mobile Air Conditioning (MAC) sector represents the largest bank, with 28 % of the total bank and 36 % of the HFC bank.

Industrial refrigeration and chillers are also big users of refrigerants. The industry bank is about 11 000 tons and 8 500 t for the chillers.



The HFC bank is about 43 400 t in France in 2011. It is clearly dominated by the MAC sector, due to a large fleet of air-conditioned vehicles. Then, the HFC bank is almost equally split between Stationary air conditioning sector (6100 t), Chillers (5800 t), Industry (5300t) and commercial refrigeration (5200t).