

FLUORINATED GREENHOUSE GASES IN THE EUROPEAN UNION

EU PRODUCTION	2007		2008		2009		2010	
	Tonnes	MtCO ₂ -eq	Tonnes	MtCO ₂ -eq	Tonnes	MtCO ₂ -eq	Tonnes	MtCO ₂ -eq
HFC-125	6,553	22.28	Fewer than 3 producers		Fewer than 3 producers		Fewer than 3 producers	
HFC-134a	31,246	40.62	21,529	27.99	18,609	24.19	21,476	27.92
HFC-143a	6,159	26.48	5,224	22.46	Fewer than 3 producers		Fewer than 3 producers	
Other HFCs, SF6 and PFCs	14,079	94.94	14,894	82.39	16,514	79.07	24,983	115.21
TOTAL	58,037	184.32	41,647	132.84	35,123	103.27	46,459	143.13

IMPORTS	2007		2008		2009		2010	
	Tonnes	MtCO ₂ -eq	Tonnes	MtCO ₂ -eq	Tonnes	MtCO ₂ -eq	Tonnes	MtCO ₂ -eq
SF6	801	17.79	691	15.35	671	14.89	539	11.98
HFC-23	129	1.55	187	2.24	124	1.49	144	1.73
HFC-32	2,302	1.27	2,429	1.34	1,766	0.97	3,010	1.66
HFC-125	10,171	34.58	10,816	36.77	13,756	46.77	15,406	52.38
HFC-134a	34,511	44.86	37,799	49.14	27,619	35.91	33,380	43.39
HFC-143a	4,445	19.11	6,510	27.99	4,448	19.13	5,073	21.81
HFC-152a	4,440	0.53	6,401	0.77	5,262	0.63	6,448	0.77
HFC-227ea	273	0.96	1,738	6.08	1,634	5.72	1,551	5.43
HFC-236fa	49	0.46	Fewer than 3 importers		Fewer than 3 importers		34	0.32
Perfluoromethane (CF4)	13	0.07	87	0.50	37	0.21	61	0.35
Perfluoroethane (C2F6)	112	1.33	186	2.22	77	0.91	150	1.78
Perfluoropropane (C3F8)	121	1.04	Fewer than 3 importers		10	0.08	Fewer than 3 importers	
Perfluorocyclobutane (c-C3F8)	Fewer than 3 importers		6	0.06	5	0.05	Fewer than 3 importers	
Other HFCs and PFCs	2,280	4.73	1,869	2.29	3,496	8.83	4,644	10.63
TOTAL	59,647	128.29	68,721	144.75	58,904	135.59	70,439	152.23

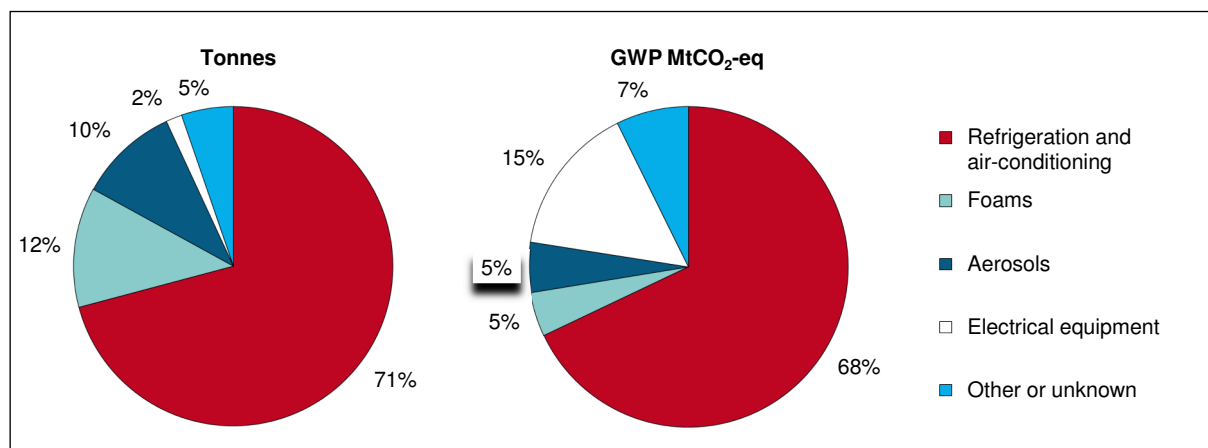
EU EXPORTS	2007		2008		2009		2010	
	Tonnes	MtCO ₂ -eq	Tonnes	MtCO ₂ -eq	Tonnes	MtCO ₂ -eq	Tonnes	MtCO ₂ -eq
SF6	1,659	36.82	1,185	26.30	1,423	31.59	1,697	37.66
HFC-23	Fewer than 3 exporters		15	0.18	1	0.01	4	0.04
HFC-32	1,245	0.68	771	0.42	605	0.33	1,319	0.73
HFC-43-10mee	Fewer than 3 exporters		46	0.07	16	0.02	48	0.07
HFC-125	2,622	8.91	2,041	6.94	1,420	4.83	2,267	7.71
HFC-134a	14,142	18.38	11,374	14.79	9,780	12.71	10,469	13.61
HFC-143a	1,351	5.81	1,455	6.26	701	3.01	984	4.23
HFC-152a	Fewer than 3 exporters		158	0.02	Fewer than 3 exporters		632	0.08
HFC-227ea	120	0.42	135	0.47	356	1.24	351	1.23
HFC-245fa	16	0.01	Fewer than 3 exporters		Fewer than 3 exporters		Fewer than 3 exporters	
HFC-365mfc	2,254	2.01	2,110	1.88	1,932	1.72	2,813	2.50
Perfluoromethane (CF4)	Fewer than 3 exporters		1	0.01	Fewer than 3 exporters		11	0.06
Perfluoroethane (C2F6)	Fewer than 3 exporters		28	0.24	Fewer than 3 exporters		Fewer than 3 exporters	
Other HFCs and PFCs	246	0.40	54	0.26	928	2.69	1,494	4.48
TOTAL	23,654	73.46	19,373	57.83	17,162	58.16	22,086	72.41

EU SALES	2007		2008		2009		2010	
	Tonnes	MtCO ₂ -eq	Tonnes	MtCO ₂ -eq	Tonnes	MtCO ₂ -eq	Tonnes	MtCO ₂ -eq
SF6	2,223	49.35	3,011	66.84	1,928	42.80	1,851	41.09
HFC-23	267	3.21	194	2.32	192	2.31	240	2.88
HFC-32	4,186	2.30	5,545	3.05	4,328	2.38	5,437	2.99
HFC-125	12,933	43.97	15,427	52.45	13,438	45.69	18,345	62.37
HFC-134a	51,693	67.20	48,123	62.56	42,005	54.61	45,580	59.25
HFC-143a	9,605	41.30	10,487	45.09	8,940	38.44	10,118	43.51
HFC-152a	4,301	0.52	2,782	0.33	5,182	0.62	6,213	0.75
HFC-227ea	857	3.00	2,336	8.18	2,075	7.26	2,199	7.70

HFC-236fa	29	0.27	37	0.35	25	0.23	30	0.28
HFC-245fa					1,248	1.19	Fewer than 3 companies	
HFC-365mfc	Fewer than 3 companies		3,785	3.37	3,054	2.72	3,554	3.16
HFC-43-10mee					50	0.07	56	0.08
Perfluoromethane (CF4)	Fewer than 3 companies		88	0.50	42	0.24	60	0.34
Perfluoroethane (C2F6)	87	1.04	183	2.18	113	1.34	154	1.83
Perfluoropropane (C3F8)	168	1.44	61	0.53	18	0.15	24	0.20
Perfluorocyclobutane (c-C4F8)					3	0.03	6	0.06
Other HFC and PFC	6,777	6.91	132	0.87	2,590	8.62	4,128	9.78
TOTAL	93,126	220.51	94,043	250.41	85,230	208.71	97,995	236.29

INTENDED APPLICATIONS	2007		2008		2009		2010	
	Tonnes	MtCO ₂ -eq	Tonnes	MtCO ₂ -eq	Tonnes	MtCO ₂ -eq	Tonnes	MtCO ₂ -eq
Refrigeration and air-conditioning	64,600	137.48	64,176	144.57	60,049	135.08	69,404	160.27
Foams	14,578	13.38	10,664	11.94	11,799	9.69	11,893	10.50
Aerosols	9,545	11.82	11,614	13.69	8,572	10.50	9,922	11.92
Electrical equipment	1,568	34.80	2,386	53.08	1,384	30.72	1,614	35.82
Fire protection	685	3.81	598	3.07	735	3.68	1,686	6.84
Solvents	209	0.37	173	0.35	162	0.29	205	0.41
Semiconductor manufacture	129	1.47	312	3.07	184	1.97	269	2.96
Magnesium die casting	31	0.69	8	0.18	Fewer than 3 companies		Fewer than 3 companies	
Feedstock	9	0.11	2	0.01	Fewer than 3 companies		1,340	0.47
Other or unknown	1,773	16.67	4,110	20.44	2,278	15.54	1,622	6.59
TOTAL	93,126	220.60	94,043	250.41	85,163	207.47	97,954	235.77

Percentage of the main intended applications of F-Gases placed on the EC market as estimated by companies in the European Union in 2010, expressed in tonnes (left) and GWP-tonnage (right)



Notes:

- Discrepancies between the totals given and the sum of the individual values making up these totals may be due to rounding.
- These data were aggregated from reports submitted by EU producers, importers and exporters, pursuant to Regulation (EC) No 842/2006, who produce, import and export more than 1 tonne of fluorinated greenhouse gases per year. Differences in data for 2009 that is included in this factsheet to the previous year factsheet are due to the fact that additional F-Gas reports for 2009 were submitted in 2011.
- Fluorinated greenhouse gases contained in imported or exported equipment are not included in these statistics.
- Only data from 3 or more companies were included in these statistics in order to protect the confidentiality of information submitted by fewer companies.
- "Blends" or "preparations" are reported according to their constituent gases.
- "EU production" refers only to production that takes place in the EU, and excludes purchases and sales between EC companies for the purposes of manufacturing blends.
- "EU Sales" refers to amounts of F-gases placed on the EU market for the first time.
- "Intended Applications" are best estimates by reporting entities of the amounts they sold for a range of intended uses.
- Metric tonnes of F-Gases produced, imported, exported and sold in the EU are converted to GWP-weighted tonnes (MtCO₂-eq) on the basis of the GWP (100-year) values listed in Annex I, Part I of Regulation (EC) No 842/2006 of the European Parliament and of the Council of 17 May 2006 on certain fluorinated greenhouse gases.