

**Table 4: Production and Atmospheric Release
CFC-114** (thousand metric tonnes)

Expanded Data

Reporting Companies only

(thousand metric tonnes)

	Cumulative														
	Annual		Total			Short Banking Times			Long Banking Times			Other			
	Production	Released	Production	Released	Unreleased	Sales	Released	Unreleased	Sales	Released	Unreleased	Sales	Released	Unreleased	
1934	2.7	0.1	2.7	0.1	2.6	0.0	0.0	0.0	2.6	0.1	2.6	0.0	0.0	0.0	
1935	2.8	0.1	5.5	0.2	5.3	0.0	0.0	0.0	5.4	0.1	5.3	0.0	0.0	0.0	
1936	2.9	0.1	8.4	0.3	8.1	0.0	0.0	0.0	8.2	0.2	8.1	0.0	0.0	0.0	
1937	3.0	0.2	11.3	0.4	10.9	0.0	0.0	0.0	11.2	0.3	10.9	0.0	0.0	0.0	
1938	3.1	0.2	14.4	0.7	13.8	0.0	0.0	0.0	14.2	0.5	13.8	0.0	0.0	0.0	
1939	3.2	0.3	17.6	0.9	16.7	0.0	0.0	0.0	17.4	0.7	16.7	0.0	0.0	0.0	
1940	3.4	0.4	21.0	1.3	19.7	0.0	0.0	0.0	20.7	1.0	19.7	0.0	0.0	0.0	
1941	3.5	0.5	24.5	1.9	22.6	0.0	0.0	0.0	24.2	1.5	22.6	0.0	0.0	0.0	
1942	3.6	0.7	28.1	2.6	25.5	0.0	0.0	0.0	27.7	2.2	25.5	0.0	0.0	0.0	
1943	3.8	1.0	31.9	3.6	28.3	0.0	0.0	0.0	31.5	3.2	28.3	0.0	0.0	0.0	
1944	3.9	1.3	35.8	4.8	31.0	0.0	0.0	0.0	35.3	4.4	31.0	0.0	0.0	0.0	
1945	4.1	3.3	39.8	8.1	31.7	3.6	1.8	1.8	35.7	5.8	29.9	0.0	0.0	0.0	
1946	4.2	5.4	44.0	13.6	30.4	7.3	5.4	1.8	36.2	7.6	28.6	0.0	0.0	0.0	
1947	4.4	5.9	48.4	19.4	28.9	11.1	9.2	1.9	36.6	9.6	27.0	0.0	0.0	0.0	
1948	4.5	6.2	52.8	25.7	27.1	15.1	13.1	2.0	37.0	11.9	25.2	0.0	0.0	0.0	
1949	4.7	6.6	57.5	32.2	25.2	19.2	17.1	2.1	37.5	14.3	23.2	0.0	0.0	0.0	
1950	4.9	6.9	62.3	39.1	23.2	23.5	21.4	2.2	38.0	17.0	21.0	0.0	0.0	0.0	
1951	5.1	7.1	67.4	46.3	21.1	28.0	25.8	2.2	38.5	19.7	18.9	0.0	0.0	0.0	
1952	5.3	7.3	72.7	53.6	19.1	32.7	30.3	2.3	39.1	22.3	16.7	0.0	0.0	0.0	
1953	5.5	7.5	78.1	61.1	17.1	37.5	35.1	2.4	39.6	25.0	14.6	0.0	0.0	0.0	
1954	5.7	7.5	83.8	68.5	15.3	42.6	40.0	2.5	40.2	27.4	12.8	0.0	0.0	0.0	
1955	5.9	7.4	89.7	76.0	13.7	47.8	45.2	2.6	40.8	29.6	11.1	0.0	0.0	0.0	
1956	6.1	7.3	95.8	83.3	12.5	53.1	50.5	2.7	41.4	31.6	9.8	0.0	0.0	0.0	
1957	6.4	7.3	102.1	90.6	11.6	58.8	56.0	2.8	42.0	33.3	8.8	0.0	0.0	0.0	
1958	6.6	7.2	108.7	97.8	10.9	64.6	61.7	2.9	42.7	34.7	8.0	0.0	0.0	0.0	
1959	6.8	7.2	115.5	105.0	10.5	70.7	67.6	3.0	43.4	35.8	7.5	0.0	0.0	0.0	
1960	7.1	7.2	122.6	112.2	10.4	76.9	73.8	3.1	44.1	36.8	7.2	0.0	0.0	0.0	
1961	7.4	7.3	130.0	119.6	10.4	83.5	80.2	3.3	44.8	37.7	7.2	0.0	0.0	0.0	
1962	7.7	7.5	137.7	127.1	10.6	90.3	86.9	3.4	45.6	38.4	7.2	0.0	0.0	0.0	
1963	7.9	7.7	145.6	134.8	10.8	97.3	93.8	3.5	46.4	39.1	7.3	0.0	0.0	0.0	
1964	8.2	7.8	153.8	142.6	11.2	104.6	101.0	3.6	47.2	39.6	7.6	0.0	0.0	0.0	
1965	8.5	8.1	162.3	150.7	11.7	112.1	108.4	3.8	48.1	40.2	7.9	0.0	0.0	0.0	
1966	8.9	8.4	171.2	159.1	12.1	120.0	116.1	4.0	49.0	40.8	8.2	0.0	0.0	0.0	
1967	9.2	8.8	180.4	167.9	12.6	128.2	124.1	4.1	49.9	41.4	8.5	0.0	0.0	0.0	
1968	9.6	9.1	190.1	177.0	13.1	136.7	132.5	4.3	50.9	42.1	8.8	0.0	0.0	0.0	
1969	10.0	9.5	200.1	186.5	13.6	145.6	141.2	4.4	51.9	42.7	9.2	0.0	0.0	0.0	
1970	10.3	9.8	210.4	196.3	14.1	154.8	150.2	4.6	53.0	43.4	9.5	0.0	0.0	0.0	
1971	10.7	10.2	221.2	206.5	14.7	164.3	159.5	4.8	54.0	44.1	9.9	0.0	0.0	0.0	
1972	11.2	10.6	232.4	217.1	15.3	174.3	169.3	5.0	55.2	44.9	10.3	0.0	0.0	0.0	
1973	11.6	11.1	244.1	228.2	15.9	184.6	179.4	5.2	56.4	45.7	10.7	0.0	0.0	0.0	
1974	12.1	11.5	256.1	239.7	16.4	195.3	189.9	5.3	57.6	46.5	11.1	0.0	0.0	0.0	
1975	12.6	11.9	268.7	251.6	17.1	206.4	200.8	5.6	58.8	47.3	11.5	0.0	0.0	0.0	

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1976	13.1	12.4	281.7	264.0	17.8	218.0	212.2	5.8	60.2	48.2	12.0	0.0	0.0	0.0	
1977	13.6	12.9	295.3	276.8	18.5	230.0	224.0	6.0	61.5	49.1	12.5	0.0	0.0	0.0	
1978	14.1	13.4	309.4	290.2	19.2	242.5	236.2	6.2	62.9	50.0	12.9	0.0	0.0	0.0	
1979	14.6	13.9	324.0	304.1	19.9	255.4	248.9	6.5	64.4	51.0	13.4	0.0	0.0	0.0	
1980	15.2	14.4	339.2	318.5	20.7	268.9	262.1	6.7	66.0	52.0	14.0	0.0	0.0	0.0	
1981	14.2	14.2	353.4	332.7	20.7	281.4	275.2	6.3	67.4	53.0	14.4	0.0	0.0	0.0	
1982	13.8	13.7	367.1	346.4	20.7	293.7	287.6	6.1	68.7	54.1	14.6	0.0	0.0	0.0	
1983	15.0	14.1	382.1	360.5	21.6	307.0	300.3	6.6	70.2	55.2	15.0	0.0	0.0	0.0	
1984	15.8	15.1	397.9	375.6	22.3	321.1	314.1	7.1	71.6	56.4	15.2	0.0	0.0	0.0	
1985	17.3	16.2	415.2	391.7	23.5	336.4	328.8	7.6	73.4	57.6	15.8	0.0	0.0	0.0	
1986	19.3	18.0	434.5	409.7	24.8	354.1	345.3	8.9	74.8	58.9	16.0	0.0	0.0	0.0	
1987	17.3	18.2	451.9	427.9	23.9	369.8	362.0	7.8	76.2	60.2	16.1	0.0	0.0	0.0	
1988	16.7	16.2	468.5	444.2	24.4	383.5	376.6	6.8	79.1	61.5	17.6	0.0	0.0	0.0	
1989	15.2	14.5	483.7	458.6	25.1	395.6	389.5	6.1	81.9	62.9	19.0	0.0	0.0	0.0	
1990	8.4	10.3	492.1	468.9	23.2	400.9	398.3	2.7	84.9	64.3	20.6	0.0	0.0	0.0	
1991	6.7	6.3	498.9	475.2	23.6	405.2	403.1	2.2	87.3	65.8	21.5	0.0	0.0	0.0	
1992	4.8	5.2	503.6	480.4	23.2	408.2	406.7	1.5	89.0	67.2	21.7	0.0	0.0	0.0	
1993	4.6	4.6	508.3	485.0	23.3	411.2	409.6	1.5	90.6	68.8	21.8	0.0	0.0	0.0	
1994	3.2	4.0	511.5	489.0	22.5	413.0	412.0	0.9	92.0	70.4	21.6	0.0	0.0	0.0	
1995	3.2	3.1	514.7	492.1	22.6	414.0	413.4	0.5	94.1	72.0	22.1	0.0	0.0	0.0	
1996	0.7	2.4	515.4	494.5	20.9	414.4	414.1	0.2	94.4	73.7	20.7	0.0	0.0	0.0	
1997	1.2	2.3	516.6	496.8	19.8	415.0	414.7	0.3	95.0	75.5	19.5	0.0	0.0	0.0	
1998	1.2	2.7	517.8	499.5	18.3	416.1	415.5	0.6	95.0	77.3	17.7	0.0	0.0	0.0	
1999	0.3	2.6	518.1	502.1	16.0	416.4	416.3	0.1	95.1	79.2	15.9	0.0	0.0	0.0	
2000	0.5	2.3	518.6	504.4	14.2	416.9	416.6	0.2	95.1	81.1	14.0	0.0	0.0	0.0	
2001	0.3	2.3	518.9	506.7	12.2	417.1	417.0	0.1	95.1	83.1	12.1	0.0	0.0	0.0	
2002	0.6	2.2	519.5	509.0	10.6	417.6	417.4	0.2	95.3	84.9	10.3	0.0	0.0	0.0	
2003	0.3	2.2	519.9	511.1	8.8	417.9	417.8	0.2	95.3	86.7	8.6	0.0	0.0	0.0	

Notes

The total CFC production reported to AFEAS in 2003 represented 16% of global CFC production and is falling. From now on emissions of CFC-114 will not be calculated.

Emissions are calculated from production and categorised sales using "emission functions".

The emission functions for CFC-114 remain the same as in previous AFEAS compilations:

Of the sales into "Short Banking Times" (mainly aerosols) and "Other", half are released in the year of manufacture and half in the year following.

Releases from "Long Banking Times" (predominantly heat pumps and similar enclosed systems) are distributed normally about a 10 year mean, with a total service lifetime of 20 years.

In previous compilations, fugitive emissions of CFC-114 arising during production were counted and reported in the *Short Banking Times* category and in *Annual and Total Released*.

However, the reported *Production* did not include this quantity of material. This has now been rectified and, in this compilation, the *Annual and Cumulative Production* reported for all years includes the quantities released from the production process. **This does not affect the historical record of releases.**