

Table TS-3. GWPs of halocarbons commonly reported under the Montreal Protocol and the UNFCCC and its Kyoto Protocol and assessed in this report relative to CO₂ for a 100-year time horizon, together with their lifetimes and GWPs used for reporting under the UNFCCC. Gases shown in blue (darker shading) are covered under the Montreal Protocol and gases shown in yellow (lighter shading) are covered under the UNFCCC. [Tables 2.6 and 2.7]

Gas	GWP for direct radiative forcing ^a	GWP for indirect radiative forcing (Emission in 2005 ^b)	Lifetime (years)	UNFCCC Reporting GWP ^c
CFCs				
CFC-12	10,720 ± 3750	-1920 ± 1630	100	n.a. ^d
CFC-114	9880 ± 3460	Not available	300	n.a. ^d
CFC-115	7250 ± 2540	Not available	1700	n.a. ^d
CFC-113	6030 ± 2110	-2250 ± 1890	85	n.a. ^d
CFC-11	4680 ± 1640	-3420 ± 2710	45	n.a. ^d
HCFCs				
HCFC-142b	2270 ± 800	-337 ± 237	17.9	n.a. ^d
HCFC-22	1780 ± 620	-269 ± 183	12	n.a. ^d
HCFC-141b	713 ± 250	-631 ± 424	9.3	n.a. ^d
HCFC-124	599 ± 210	-114 ± 76	5.8	n.a. ^d
HCFC-225cb	586 ± 205	-148 ± 98	5.8	n.a. ^d
HCFC-225ca	120 ± 42	-91 ± 60	1.9	n.a. ^d
HCFC-123	76 ± 27	-82 ± 55	1.3	n.a. ^d
HFCs				
HFC-23	14,310 ± 5000	-0	270	11,700
HFC-143a	4400 ± 1540	-0	52	3800
HFC-125	3450 ± 1210	-0	29	2800
HFC-227ea	3140 ± 1100	-0	34.2	2900
HFC-43-10mee	1610 ± 560	-0	15.9	1300
HFC-134a	1410 ± 490	-0	14	1300
HFC-245fa	1020 ± 360	-0	7.6	— ^e
HFC-365mfc	782 ± 270	-0	8.6	— ^e
HFC-32	670 ± 240	-0	4.9	650
HFC-152a	122 ± 43	-0	1.4	140
PFCs				
C ₂ F ₆	12,010 ± 4200	-0	10,000	9200
C ₆ F ₁₄	9140 ± 3200	-0	3200	7400
CF ₄	5820 ± 2040	-0	50,000	6500
Halons				
Halon-1301	7030 ± 2460	-32,900 ± 27,100	65	n.a. ^d
Halon-1211	1860 ± 650	-28,200 ± 19,600	16	n.a. ^d
Halon-2402	1620 ± 570	-43,100 ± 30,800	20	n.a. ^d
Other Halocarbons				
Carbon tetrachloride (CCl ₄)	1380 ± 480	-3330 ± 2460	26	n.a. ^d
Methyl chloroform (CH ₃ CCl ₃)	144 ± 50	-610 ± 407	5.0	n.a. ^d
Methyl bromide (CH ₃ Br)	5 ± 2	-1610 ± 1070	0.7	n.a. ^d

^a Uncertainties in GWPs for direct positive radiative forcing are taken to be ±35% (2 standard deviations) (IPCC, 2001).

^b Uncertainties in GWPs for indirect negative radiative forcing consider estimated uncertainty in the time of recovery of the ozone layer as well as uncertainty in the negative radiative forcing due to ozone depletion.

^c The UNFCCC reporting guidelines use GWP values from the IPCC Second Assessment Report (see FCCC/SBSTA/2004/8, <http://unfccc.int/resource/docs/2004/sbsta/08.pdf>).

^d ODSs are not covered under the UNFCCC.

^e The IPCC Second Assessment Report does not contain GWP values for HFC-245fa and HFC-365mfc. However, the UNFCCC reporting guidelines contain provisions relating to the reporting of emissions from all greenhouse gases for which IPCC-assessed GWP values exist.