

**Cumulative Emissions, Fair Shares and Carbon Creditors and Debts:  
Selected Countries  
1850-2008**

Country	Cumulative CO2 Emissions 1850-2008 (in billion tons or Gigatons)	Cumulative Fair Share CO2 Emissions 1850-2008 (in billion tons or Gigatons)	CO2 Debt or Credit As of 2009 (in billion tons or Gigatons)	
Australia	13.67976	3.82891	9.85085	Debtor
<b>Bolivia</b>	<b>0.26666</b>	<b>1.46129</b>	<b>-1.19463</b>	<b>Creditor</b>
<b>Brazil</b>	<b>9.90507</b>	<b>30.52591</b>	<b>-20.62084</b>	<b>Creditor</b>
Canada	25.50750	6.36392	19.14358	Debtor
<b>China</b>	<b>113.82296</b>	<b>265.48952</b>	<b>-151.66656</b>	<b>Creditor</b>
France	32.92193	16.50138	16.42055	Debtor
Germany	81.11465	23.71225	57.40240	Debtor
<b>India</b>	<b>33.24987</b>	<b>193.09309</b>	<b>-159.84322</b>	<b>Creditor</b>
Japan	45.87164	30.96078	14.91086	Debtor
<b>Tanzania</b>	<b>0.12818</b>	<b>4.66290</b>	<b>-4.53472</b>	<b>Creditor</b>
United Kingdom	69.83219	17.17747	52.65472	Debtor
United States	343.13229	61.78551	281.34678	Debtor
Annex I	877.73098	309.35118	568.38	Debtor
<b>Non-Annex I</b>	<b>336.20176</b>	<b>902.13768</b>	<b>-565.94</b>	<b>Creditor</b>

\* Countries in *bold italics* are developing countries.

\*\* **Carbon debt** refers to the amount by which the country's cumulative emissions exceeded what its cumulative fair share of emissions (based on its population) should have been for the same period 1850-2008. **Carbon credit** refers to the amount by which cumulative emissions are less than the cumulative fair share for the same period.

\*\*\* Data sources are from S Kartha (2009) and South Centre calculations, both based on:

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### China

Year	Annual Total CO2 Emissions (in million tons)	Per Capita CO2 Emissions (in tons)		
1850	NO DATA AVAILABLE			
1855				
1860				
1865				
1870				
1875				
1880				
1885				
1890				
1895				
1900			0.10	0.00
1905			2.30	0.01
1910	18.76	0.04		
1915	16.10	0.04		
1920	25.31	0.05		
1925	33.25	0.07		
1930	37.95	0.08		
1935	57.67	0.11		
1940	86.16	0.17		
1945	50.39	0.09		
1950	80.04	0.15		
1955	192.95	0.32		
1960	783.76	1.17		
1965	480.82	0.67		
1970	776.53	0.95		
1975	1,152.93	1.26		
1980	1,494.59	1.52		
1985	1,971.77	1.88		
1990	2,427.20	2.14		
1995	3,230.32	2.68		
2000	3,378.72	2.68		
2005	5,590.38	4.29		
2008	6,528.62	4.93		

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**India**

Year	Annual Total CO2 Emissions (in million tons)	Per Capita CO2 Emissions (in tons)
1850	NO DATA AVAILABLE	
1855		
1860		
1865		
1870		
1875		
1880	2.05	0.01
1885	2.67	0.01
1890	4.78	0.02
1895	7.60	0.03
1900	12.91	0.05
1905	18.27	0.06
1910	26.30	0.09
1915	36.93	0.12
1920	39.12	0.13
1925	45.64	0.14
1930	48.91	0.15
1935	47.61	0.13
1940	57.06	0.15
1945	63.46	0.15
1950	66.64	0.19
1955	85.52	0.22
1960	120.59	0.28
1965	165.98	0.34
1970	193.85	0.36
1975	251.56	0.41
1980	347.59	0.51
1985	488.70	0.65
1990	680.37	0.81
1995	912.35	0.99
2000	1,161.61	1.16
2005	1,403.38	1.28
2008	1,638.91	1.43

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### United Kingdom

Year	Annual Total CO2 Emission (in million tons)	Per Capita CO2 Emissions (in tons)
1850	122.69	4.51
1855	130.54	4.71
1860	168.07	5.82
1865	205.64	6.83
1870	228.66	7.28
1875	271.69	8.27
1880	297.34	8.59
1885	315.52	8.76
1890	353.28	9.42
1895	365.82	9.33
1900	420.05	10.21
1905	437.99	10.19
1910	470.07	10.47
1915	489.84	10.57
1920	480.91	10.27
1925	462.16	10.26
1930	463.53	10.11
1935	455.54	9.72
1940	506.69	10.51
1945	464.17	9.44
1950	500.88	9.99
1955	577.14	11.33
1960	584.32	11.16
1965	622.63	11.46
1970	639.69	11.50
1975	598.53	10.65
1980	582.61	10.35
1985	551.92	9.75
1990	569.58	9.91
1995	551.47	9.44
2000	546.35	9.18
2005	546.81	9.05
2008	570.38	9.36

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### United States

Year	Annual Total CO2 Emission (in million tons)	Per Capita CO2 Emissions (in tons)
1850	19.81	0.84
1855	38.19	1.38
1860	47.47	1.49
1865	58.86	1.63
1870	98.69	2.45
1875	135.85	3.00
1880	198.83	3.94
1885	272.36	4.79
1890	402.04	6.35
1895	480.30	6.88
1900	663.22	8.68
1905	985.22	11.71
1910	1,270.15	13.69
1915	1,366.26	13.54
1920	1,710.84	16.01
1925	1,709.37	14.70
1930	1,708.34	13.81
1935	1,470.26	11.50
1940	1,858.02	14.01
1945	2,313.72	16.47
1950	2,538.15	16.67
1955	2,724.00	16.42
1960	2,921.75	16.17
1965	3,443.84	17.72
1970	4,220.54	20.58
1975	4,263.90	19.74
1980	4,607.55	20.23
1985	4,405.29	18.47
1990	4,801.00	19.19
1995	5,204.51	19.52
2000	5,650.38	20.03
2005	5,780.64	19.56
2008	6,029.79	19.82

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