

**FEE Global Forest Fund
CO₂ compensation formula 2010 from flights**

CO₂ compensation calculation method

Compensation of 1 ton of CO₂ will require around 50 growing trees a year (source: Coolflying.com and VBV-Belgium).

An average airplane produce around 0.18 ton CO₂ per 1000 km for travels less than 1000 km, and 0.11 ton CO₂ per 1000 km for travels longer than 1000 km (source: UNEP 2000, the GHG-Indicator).

Because flying produces more emissions than CO₂, EU suggests to double the amount of CO₂ for a fair impact calculation (source: COM2005 – Reducing the Climate Change Impact of Aviation, Brussels). By doubling the CO₂ amount, we are very close or beyond a real compensation.

Since the calculation method is using a rough estimate with a doubling of the amount to ensure a fair impact calculation, FEE has, in order to minimize bureaucracy, decided to calculate the direct distances between the airport of departure and the airport of arrival (and not include airports of intermediate landings).

According to the results of COP15, price of CO₂ is by the end of 2009: €12.40/ton.

CO₂ prices in 2010

	CO ₂ per 1000 km	CO ₂ + emissions per 1000 km	Calculation
Travel <1000 km	0.18 ton CO ₂	0.36 ton CO ₂	$\frac{X \text{ km} \times 0.36 \times \text{€}12.40}{1000}$
Travel >1000 km	0.11 ton CO ₂	0.22 ton CO ₂	$\frac{X \text{ km} \times 0.22 \times \text{€}12.40}{1000}$