

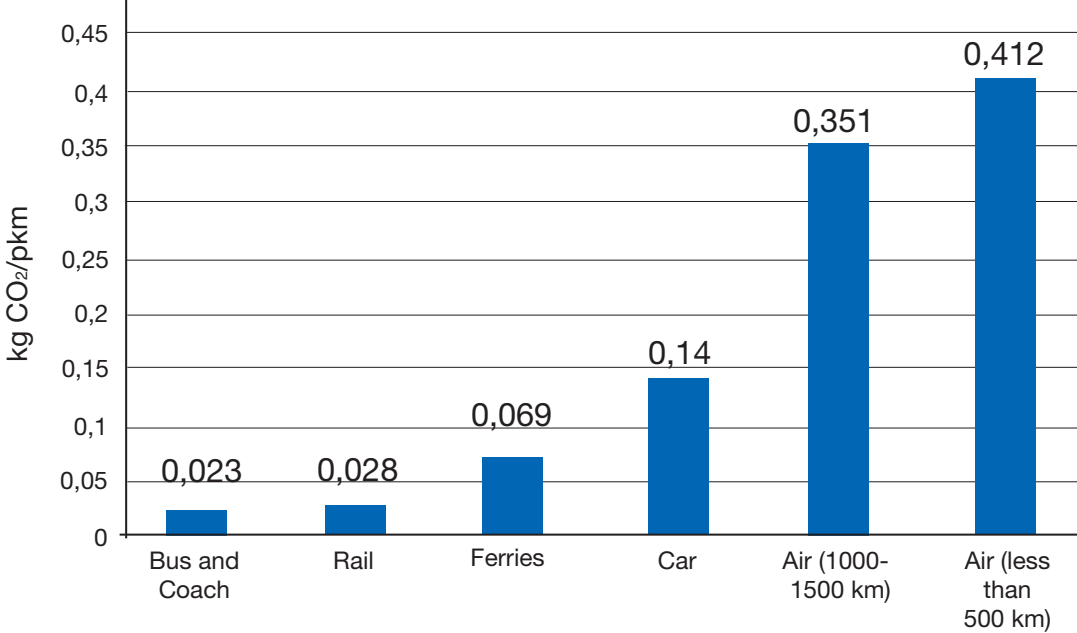
Buses and coaches are environmental champions

A conference on environmentally friendly travelling in Europe (2006)¹, hosted by several competent authorities in Austria, recently showed that bus and coach transport is the environmental champion of all transport modes.

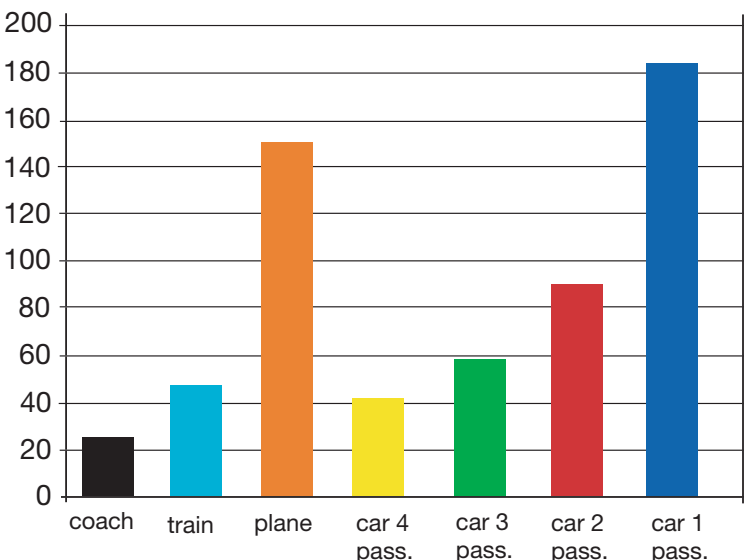
Operational emission factors for tourism origin-destination volume modes (excerpt)

Mode	Greenhouse gas emissions (kg CO ₂ -e/pkm)	Particulate matters (gram/pkm)	NOx (gram/pkm)
Air < 500 km	0.412	0.0018	1.028
Air 1000-1500 km	0.351	0.012	0.578
Rail	0.028	0.013	0.160
Car	0.140	0.023	0.500
Ferries	0.069	0.001	1.600
Bus and Coach	0.023	0.010	0.246

CO₂ emissions per transport mode



CO₂ emissions per mode in gr/km

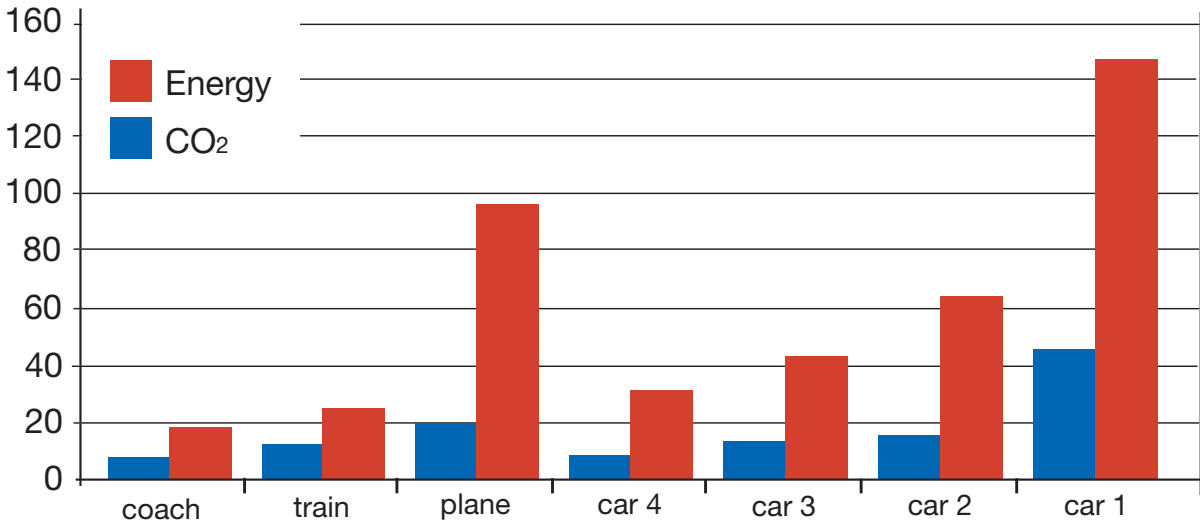


This year's March edition of the German magazine Focus analysed CO₂ emissions in gramme per kilometre for different modes of transport. They varied from 22 for coaches to 54 for trains, 157 for planes and between 47 (4 persons occupying), 63 (3 persons), 96 (2 persons) and 190 (1 person) for cars.

¹ Source: Conference on environmentally friendly travelling in Europe, Vienna 30-31 January 2006

Simulation of a trip between Hamburg and Munich

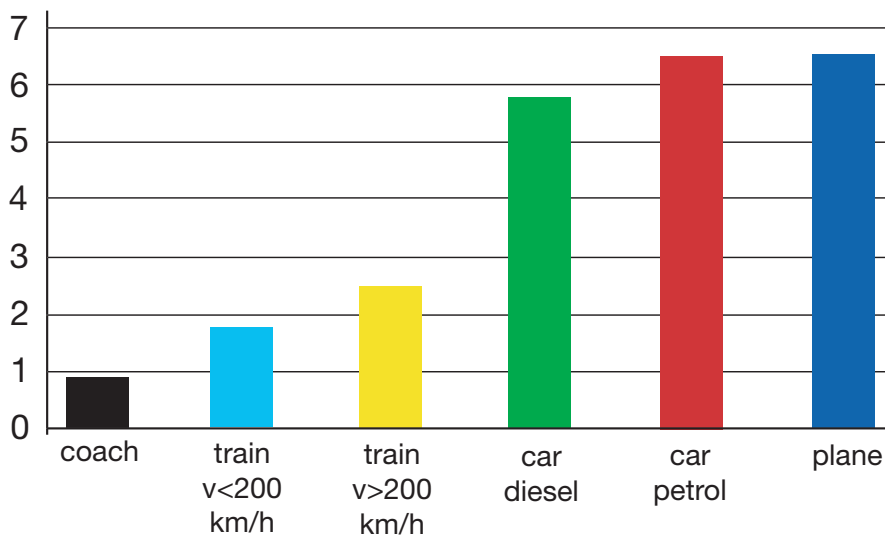
	Coach	Train	Plane	Car 4 pass.	Car 3 pass.	Car 2 pass.	Car 1 pass.
Energy (liter/passenger)	13	20	43	15	20	30	60
Co ₂ (kg/passenger)	26	34	101	38	51	76	152



... and the most fuel efficient among all modes

Germany

Fuel consumption per 100 km/passenger



A study undertaken by the IFEU Institute in Heidelberg shows that coaches consume on average 0.9 litres of diesel equivalent per 100 km/person, trains between 1.9 and 2.6 litres depending on speed, cars between 5.9 litres (diesel) and 6.7 litres (petrol), and planes 6.6 litres.

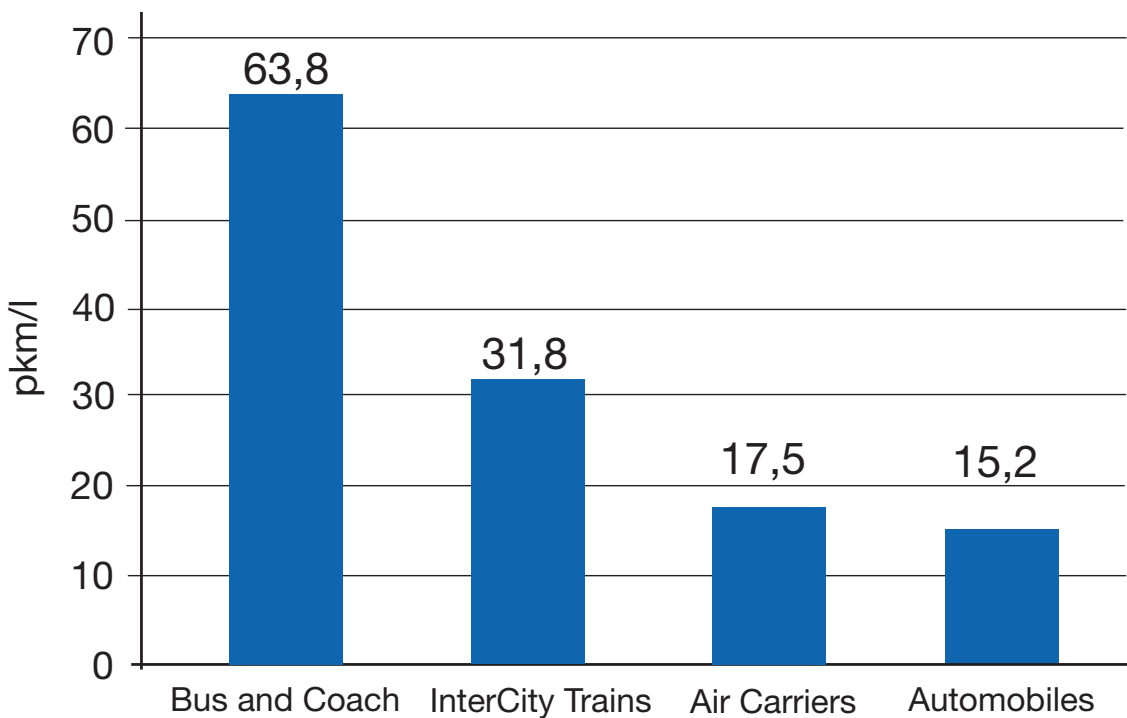
USA

According to the latest motorcoach census in the USA (2001), bus and coach fuel consumption per passenger-miles is the lowest - 0.0068 gallon per passenger-mile, which is 76% lower than air carrier and passenger car fuel consumption - and it is declining. Energy intensity is lowest - 946 Btu² per passenger mile, which is one-fourth of the energy intensity of air carriers and passenger cars. Bus and coach transport displays the lowest CO2 emissions per passenger kilometre of any other mode of transport.

Latest USA data (2006) confirm these figures

According to a recently published study carried out by Nathan Associates on behalf of the American Bus Association (ABA) Foundation, coaches are the most fuel-efficient transportation mode in the United States. The US motorcoach industry provided 148.4 passenger miles per gallon (MPG) of fuel in 2004 - more than double the second most fuel-efficient sector, intercity trains at 74.1 passenger MPG. Air carriers achieved 40.9 passenger MPG, and automobiles achieved 35.4 passenger MPG.

Fuel efficiency by transport mode³



²Source: A Btu is the quantity of heat required to raise the temperature of one pound of water from 60°F to 61°F at a constant pressure of one atmosphere. Btu varies by energy source. The US Bureau of Transport Statistics (BTS) uses the following conversion rates: 135,000 Btu per gallon of jet fuel; 125,000 Btu per gallon of automotive gasoline; 138,700 Btu per gallon.

³Source: American Bus Association (ABA) 2007