



CO₂ Footprint and travel in student exchanges

Understanding impacts. Inspiring sustainable choices.



ECOLOGICAL SUSTAINABILITY IN ERASMUS+

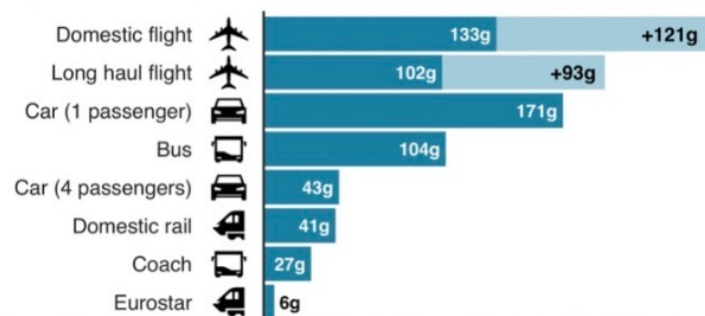


Small actions today, big impact tomorrow – together for a sustainable world.

Emissions from different modes of transport

Emissions per passenger per km travelled

■ CO₂ emissions ■ Secondary effects from high altitude, non-CO₂ emissions



- Different travel opportunities (both groups)

- Travel bus: 6,540t
- Train: 2,29t
- Car (4 persons): 6,13t

CO₂ FOOTPRINT OF OUR TRIP

Mayen (Rhineland-Palatinate, Germany) → Uherské Hradiště (Czechia) by Coach

CALCULATION		
1	Distance per direction Mayen → Uherské Hradiště = 929 km	929 km
2	Total distance (round trip) 929 km × 2	1,858 km
3	Number of travelers 22 persons	22 persons
4	Passenger kilometers Total distance × Number of travelers 1,858 km × 22	40,876 passenger km
5	CO ₂ emissions For a coach, approx. 0.04 kg CO ₂ e per passenger kilometer is used (typical average). Passenger kilometers × emission factor 40,876 × 0.04 kg CO ₂ e	≈ 1,635 kg CO ₂ e total ↓ ≈ 74 kg CO ₂ e per person

Actual emissions can vary depending on the bus, load factor and driving style (approx. 0.03–0.05 kg CO₂e/pkm).

OUR TRIP		
	Mayen (Rhineland-Palatinate, Germany)	Uherské Hradiště (Czechia)
	Stopover in Prague (on the way there)	
	Distance per direction:	929 km
	Total distance (round trip):	1,858 km
	Number of travelers:	22 persons
	Passenger kilometers: 1,858 km × 22	40,876 pkm
	CO ₂ emissions (coach): 40,876 pkm × 0.04 kg CO ₂ e	≈ 1,635 kg CO ₂ e total
		≈ 74 kg CO ₂ e per person

We traveled 1,858 km (round trip) by coach with 22 persons. This results in a total of approx. 1.64 tonnes CO₂e – that is approx. 74 kg CO₂e per person.

Transport Mode	CO ₂ Emissions	Sustainability
Walking	Very low	Excellent
Bicycle	Very low	Excellent
Train	Low	Very good
Bus	Low to medium	Good
Electric Car	Medium to low	Good
Gasoline/ Diesel Car	High	Poor
Airplane	Very high	Very poor



The social dimension of sustainability

Conclusion



Choose sustainable travel

Trains, buses, walking, and cycling have a lower CO₂ footprint.



Value the social impact

Exchanges promote language learning, intercultural understanding and friendships.



Sustainable travel + cultural exchange

Together, they create a positive impact on both people and the planet.



THANK YOU FOR YOUR ATTENTION!!