

<https://www.google.com/maps/d/edit?mid=1b1FuObS2nLTVqKHjCCNr-1TsWHcrIk&usp=sharing>

Emission impact of mode of travel-conversion factors								
	g of CO2 /passenger km	Emission ratios with respect to flying (%)	Source					
Ferry	18.738	13.46	Defra					
Rail national	36.94	26.53	Carbon Academy	https://www.carbonfootprint.com/calculator.aspx				38.7
Long-distance rail	4.368719965	3.14	Carbon Academy	https://www.carbonfootprint.com/calculator.aspx				10.61598952
Flight (international)	139.2452	100.00	Atmosfair.de					
Coach	27.73629187	19.92	Carbon Academy	https://www.carbonfootprint.com/calculator.aspx				
Taxi	152.8384279	109.76	Carbon Academy	https://www.carbonfootprint.com/calculator.aspx				
Shared car (4 people)	38.20960699	27.44	Carbon Academy	https://www.carbonfootprint.com/calculator.aspx				
Bus	102.4327785	73.56	Carbon Academy	https://www.carbonfootprint.com/calculator.aspx				
How to read this table: Ferry emits 18,7 grams of CO2 per km per passenger. This is equal to 13% of what an airplane emits per km per passenger.								
Etc.								

	My outbound trip	My Inbound trip (complete no-fly)	Total slow- travel	Airplane only	Difference between my travel Vs. Airplane
Emissions from means of transport other than planes (Kg CO2-eq)	188	557	744	0	
Emissions from airplanes (Kg CO2-eq)	1672	0	1672	10526	
Total Emissions (Kg CO2-eq)	2349	557	2906	10526	7620
Ratio emissions my trip/airplane only	45%	11%			
Total distance overland/oversea (km)	14110	28226	42336		
Proportion of overall distance covered without planes	65%	100%		0%	
Duration (hours)	330	672	1002	70	862
Costs (€)	1719	1527	3246	2440	-1634
Note: Emissions are in Kg of CO2-eq.					
My outbound trip includes 2 flights (Kolkata-Bangkok and Singapore-Buka,PNG) due to impossibility of entering Myanmar by land and impossibility of travelling by ferry from Singapore to Indonesia.					
Travelling overland from Bangkok to Singapore reduces emissions in comparison with flying over the full stretch Kolkata-Singapore.					
The inbound trip has been entirely no-fly.					
Estimates of costs is provisional.					
Costs do not include visa application expenses (about €1200).					
	2914	4706	7620		

Total plan	Distance (km)	Means of transport	Duration	Expenses	kg of CO2 (from other than aviation)		Total emissions	Total distance	25993	Total duration	224	Total expenses	2054.86
					kg of CO2	from other than aviation							
Kul-Medan	124	International rail	7.6	14	180								
Medan-Bari	2006	International rail	8	80									
Bari-Pattar	1577	Ferry	18	81									
Pattar-Indralab	1307	Coach	18	81									
Indralab-Bakara	438	International rail	5	26									
Bakara-Sidabari	737	Coach	12	25									
Sidabari-Tan	633	Coach	12	25									
Tan-Sibak	333	Coach	5	15									
Sibak-Qem	734	Coach	14	15									
Qem-Bam	1005	Coach	16	15									
Bam-Tuban	428	Coach	8	10									
Tuban-Quetta	612	national rail	14	15									
Quetta-Multan	612	national rail	12	15									
Multan-Lahore	338	national rail	5	10									
Lahore-Mughlan	30	Coach	1	5									
Mughlan-Kullaba	2012	national rail	26	10									
Kullaba-Bangkok	3838	airplane	8	100									
Bangkok-Singapore	3832	International rail	24	80									
Singapore-Baku	6005	airplane	8	837.86									

Emission from non-airplane means of transport

Public transport carbon footprint calculator

How much is your trip's carbon footprint? (in kg CO2e)

Bus: 124 km
 Train: 2006 km
 Ship: 1577 km
 Motorboat: 1307 km
 International rail: 438 km
 National rail: 737 km
 Plane: 633 km
 Taxi: 333 km
 Car: 734 km
 Motorcycle: 1005 km

Total bus & non-airplane: 22,26 tonnes of CO2e

CO2e from: 22,26 tonnes of CO2e
 CO2e from: 22,26 tonnes of CO2e
 CO2e from: 22,26 tonnes of CO2e

CO2e Conversion table

Mode of transport	CO2e per km	CO2e per hour
Ferry	0.0187	11.21
Rail national	0.0369	22.11
Rail international	0.0485	29.11
Flight international	0.139247	83.52
Coach	0.0272	16.31

Kul-Medan

City Airport Run Total

7,6 km
 223,5 kg CO2e
 128,2 kg CO2e

Network Airlines and other Air-RR emissions are CO2e emissions

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Emission Calculation Results

1-day flight for London

Route: London -> Singapore -> London

Flight class: Economy

Passenger: 1

Flight date: 2023-10-01

Flight duration: 11h 45m

Flight distance: 10,826 km

Flight emissions: 1,392.47 kg CO2e

Flight emissions per passenger: 1,392.47 kg CO2e

Flight emissions per passenger per km: 0.1282 kg CO2e/km

Flight emissions per passenger per hour: 118.2 kg CO2e/hour

Flight emissions per passenger per kg of CO2e from other than aviation: 0.0187 kg CO2e/kg

Flight emissions per passenger per kg of CO2e from other than aviation per km: 0.0187 kg CO2e/kg/km

Flight emissions per passenger per kg of CO2e from other than aviation per hour: 0.1516 kg CO2e/kg/hour

Flight emissions per passenger per kg of CO2e from other than aviation per km per hour: 0.0187 kg CO2e/kg/km/hour

Flight emissions per passenger per kg of CO2e from other than aviation per km per hour per km: 0.00035 kg CO2e/kg/km/hour/km

Flight emissions per passenger per kg of CO2e from other than aviation per km per hour per km per hour: 0.0000035 kg CO2e/kg/km/hour/km/hour

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Flight emissions per passenger per kg of CO2e from other than aviation per km per hour per km per hour per km per hour per km per hour per km: 0.0000000000035 kg CO2e/kg/km/hour/km/hour/km/hour/km/hour/km

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Route	Mode of transport	Distance (km)	Mode of transport	Distance (km)	Country	Total emissions	Total distance	Total duration	Total expenses	Total cost	
1 Berlin-Milan	International rail	184	Coach	14	Germany, Switzerland, Italy	142,373,372	198	150	180	Coach	11
2 Milan-Bari	Long-distance	8	Coach	14	Italy	7,6	International rail/EU-Mil	124	180	International rail/EU-Mil	1
3 Bari-Palermo	Short-haul	18	Coach	14	Italy, Greece	20	Long-distance rail	478	64	Total international rail	175
4 Athens-Athens	Coach	4	Coach	14	Greece	18,60	Ferry	104	31	Total ferry	141
5 Athens-Istanbul	Ferry	15	Coach	14	Greece, Turkey	91,387,739,1	Taxi (incl. airport pick-up)	508	85	Taxi	2
6 Istanbul-Istanbul	Coach	3	Coach	14	Turkey	36,412,379,546	Shared car	953	7	Algebra	127,56
7 Antalya-Antalya	Coach	12	Coach	14	Turkey	82	Flight Kohala-Bangkok	1058	17	Algebra	2
8 Ankara-Van	Coach	10	Coach	14	Turkey	1672	Singapore-Mosby-Baku	6000	14	Algebra	2
9 Van-Istanbul	Coach	12	Coach	14	Turkey, Iran	5	Public company	930	16	Public company	2
10 Tabriz-Tabriz	Long-distance	14	Coach	14	Iran	10	Proportion of trip cost	57,536			
11 Tehran-Kerman	Coach	16	Coach	14	Iran	10	Difference in emissions	-249			
12 Tehran-Isfah	Coach	5	Coach	14	Iran	10	Proportion of total travel emissions				
13 Isfah-Tabriz	Coach	6	Coach	14	Iran	10	Comparison to airplane (N)	400001			
14 Tehran-Qum	Police company	20	Coach	14	Pakistan	10	Excluding Singapore	10,305			
15 Qum-Isfah	Shared car	12	Coach	14	Pakistan	10	Port Mombasa	8177			
16 Islamabad-Lahore	Coach	5	Coach	14	Pakistan	10	Proportion of emissions	22,326			
17 Lahore-Vaughan	Taxi	1	Coach	14	Pakistan	10	Proportion of total travel emissions				
18 Amsterdam-Kolkata	Long-distance	28	Coach	14	India	10	Comparison to airplane (N)				
19 Kolkata-Bangkok	Airplane	6	Coach	14	India, Thailand	10					
20 Bangkok-Hat Yai	Long-distance	16	Coach	14	Thailand	10					
21 Hat Yai-Singapore	Coach	12	Coach	14	Thailand, Malaysia, Singapore	10					
22 Singapore-Baku	Airplane	8	Coach	14	Singapore, Fiji, New Guinea	10					

Emission Calculation Results

Mode	CO2	Flight	Flight	Assess
	Days	Days	Days	Days
Public transport	100%	100%	100%	100%
Coach	100%	100%	100%	100%
International rail	100%	100%	100%	100%
Long-distance	100%	100%	100%	100%
Ferry	100%	100%	100%	100%
Taxi	100%	100%	100%	100%
Shared car	100%	100%	100%	100%
Algebra	100%	100%	100%	100%
Public company	100%	100%	100%	100%

Emission from mode airplane, shared car, transport

Public transport carbon footprint calculator

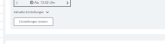
Mode	CO2	Flight	Flight	Assess
Ferry	0.0000	0.0000	0.0000	0.0000
International rail	0.0000	0.0000	0.0000	0.0000
Long-distance	0.0000	0.0000	0.0000	0.0000
Ferry	0.0000	0.0000	0.0000	0.0000
Coach	0.0000	0.0000	0.0000	0.0000

Form with dropdowns for route and mode, and a 'Calculate' button.

Public transport carbon footprint calculator



Public transport carbon footprint calculator



Public transport carbon footprint calculator



Public transport carbon footprint calculator



Public transport carbon footprint calculator

Emission Calculation Results

Mode	CO2	Flight	Flight	Assess
	Days	Days	Days	Days
Public transport	100%	100%	100%	100%
Coach	100%	100%	100%	100%
International rail	100%	100%	100%	100%
Long-distance	100%	100%	100%	100%
Ferry	100%	100%	100%	100%
Taxi	100%	100%	100%	100%
Shared car	100%	100%	100%	100%
Algebra	100%	100%	100%	100%
Public company	100%	100%	100%	100%

Mode	Weight	Distance	CO2 emissions	Total CO2
1. Suburban	500	100	3.0	300
2. Suburban	500	100	3.0	300
3. Suburban	500	100	3.0	300
4. Suburban	500	100	3.0	300
5. Suburban	500	100	3.0	300
6. Suburban	500	100	3.0	300
7. Suburban	500	100	3.0	300
8. Suburban	500	100	3.0	300
9. Suburban	500	100	3.0	300
10. Suburban	500	100	3.0	300
11. Suburban	500	100	3.0	300
12. Suburban	500	100	3.0	300
13. Suburban	500	100	3.0	300
14. Suburban	500	100	3.0	300
15. Suburban	500	100	3.0	300
16. Suburban	500	100	3.0	300
17. Suburban	500	100	3.0	300
18. Suburban	500	100	3.0	300
19. Suburban	500	100	3.0	300
20. Suburban	500	100	3.0	300

Emission Calculation Results

Mode	Weight	Distance	CO2 emissions
Suburban	500	100	3.0
Train	1000	100	0.5
Ferry	1000	100	1.0
Shared car	1000	100	2.0
Truck	1000	100	1.5
Cargo ship	1000	100	0.5
Van	1000	100	2.5
Tram	1000	100	0.5
Motorcycle	1000	100	1.0
Jet airplane	1000	100	1.0

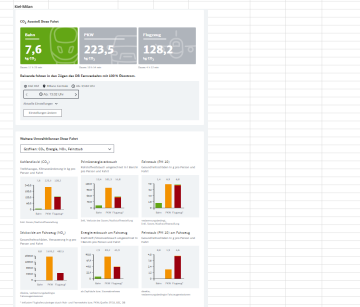
Emission Calculation Results

Mode	Weight	Distance	CO2 emissions
Suburban	500	100	3.0
Train	1000	100	0.5
Ferry	1000	100	1.0
Shared car	1000	100	2.0
Truck	1000	100	1.5
Cargo ship	1000	100	0.5
Van	1000	100	2.5
Tram	1000	100	0.5
Motorcycle	1000	100	1.0
Jet airplane	1000	100	1.0

Milan-Rail 1244 Miles 14 180 Germany, September, July

Fairly relevant carbon footprint calculator
 This helps to calculate your carbon footprint and compare it to others.
 It's free to use and doesn't require any registration.

Total CO2 emissions: 1244 Miles * 14 * 180 Germany, September, July



Emission Calculation Results

Mode	Weight	Distance	CO2 emissions
Suburban	500	100	3.0
Train	1000	100	0.5
Ferry	1000	100	1.0
Shared car	1000	100	2.0
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Cargo ship	1000	100	0.5
Van	1000	100	2.5
Tram	1000	100	0.5
Motorcycle	1000	100	1.0
Jet airplane	1000	100	1.0

	Emissions (CO ₂ -eq)	Emissions one-way
Kiel-Buka	27538	10526
Distance round trip	10526	5263
Source:	https://www.atmosfair.de/en/offSet/flight/	
Singapore-POM-Buka	6001	1672

Emission Calculation Results

1 round-trip flight for 1 person

From	- to	Flight class	Flight type	Aircraft type
Kiel - Holtenau (KEU)	-	Buka Is. (BUA)	Premium Economy	

Your flight - climate impact of the most CO₂-efficient airlines in comparison*
 There is insufficient data for a comparison of the various specific airline CO₂ emissions on this flight route.

Your climate impact ⁰

Climate impact	10,526 kg CO ₂
Compensation amount	€ 243
Hide detailed emission data	
Flight distance	27,538 km
Maximum flight altitude	12,500 m
CO ₂ emissions	3,334 kg
Climate impact of contrails, ozone formation, etc.	6,971 kg
Fuel consumption	1,406 l

Your climate impact compared to

Your flight (per person)	kg 10,526
Emissions per capita per year (in Ethiopia)	kg 360
Emissions for one car per year (12,000 km; middle class model)	kg 2,000
Climate compatible annual emissions budget for one person ⁰	kg 1,500

	Emissions (CO ₂ -eq)	Emissions one-way
Kiel-Buka	27538	10526
Distance round trip	10526	5263
Source:	https://www.atmosfair.de/en/offSet/flight/	
Singapore-POM-Buka	6001	1672

Emission Calculation Results

1 one-way flight for 1 person

From	- to	Flight class	Flight type	Aircraft type
Kolkata - Netaji Subhash Chandra Bose (CCU)	-	Bangkok (BKK)		

Your flight - climate impact of the most CO₂-efficient airlines in comparison*

- SpiceJet
- Climate impact: 322 kg CO₂ - 80 CEP**
- Thai Airways International
- Climate impact: 404 kg CO₂ - 89 CEP**
- Average airline
- Climate impact: 362 kg CO₂ - 75 CEP**

*The displayed airlines are based on the last flight schedule. The current flight schedule might deviate from that (i.e. the airline does currently not operate on this flight route).

**CEP = Climate efficiency points (100 = highest score)

Your climate impact ⁰

Climate impact	362 kg CO ₂
Compensation amount	€ 9
Hide detailed emission data	
Flight distance	1,658 km

CO2 conversion factors Germany	https://nachhaltigkeit.deutschebahn.com/en/measures/environmental-mobility-check		
CO2 calculator Deutsche Bahn trans	https://www.umweltmobilcheck.de/		
CO2 calculator	https://www.carbonfootprint.com/calculator.aspx		
CO2 calculator for flights	https://www.atmosfair.de/en/offset/flight/		
DEFRA Conversion tables		Ratios with respect to flying (%)	
Ferry kg/passenger km	0.018738	13.45683729	
Rail national	0.03694	26.5287421	
Rail international	0.00497	3.56924332	
Flight (international)	0.139245	100	
Coach	0.02732	19.6200659	
Other data:			
Total CO2 emissions (tons of CO2 in 2019)	3600000000	0.00000000	
Return Milan-London private jet flight	500		
annual emission by a car	2000		
Relationship between CO2 emissions and temperature increase			
	1.2	Temperature increase	
	1.5	thousand of gigatonnes CO2 emitted	
	0.8		

from	- to	Flight class	Flight type	Aircraft type
Kolkata - Netaji Subhash Chandra Bose (CCU)	- Bangkok (BKK)	Economy		

Your flight - climate impact of the most CO₂-efficient airlines in comparison*

- Spice Jet
Climate impact: 260 kg CO₂ - 80 CEP**
- Thai Airways International
Climate impact: 323 kg CO₂ - 69 CEP**
- Average airline
Climate impact: 290 kg CO₂ - 75 CEP**

Airline	Climate impact (kg CO ₂)	CEP**
Spice Jet	260	80
Thai Airways International	323	69
Average airline	290	75

Bus: km

Coach: km

National rail: km

International rail: km

Tram: km

Tube / Subway: km

Taxi: km

Calculate Bus & Rail Footprint

Total Bus & Rail Footprint = 0.05 tonnes of CO₂e **Offset Now**

0.05 tonnes: 1832 km travelled by coach [\[remove\]](#)

Kolkata-Bangkok (plane)	0.29	Kolkata-Singapore	605
Coach Bangkok-Singapore	0.05		
	0.34		

Travelling by plane+coach from Kolkata to Singapore saves 0,27 tonnes of CO₂

Emission Calculation Results

1 one-way flight for 1 person

from	- to	Flight class	Flight type	Aircraft type
Kolkata - Netaji Subhash Chandra Bose (CCU)	- Singapore - Changi (SIN)	Economy		

Your flight - climate impact of the most CO₂-efficient airlines in comparison*

- SilkAir
Climate impact: 590 kg CO₂ - 58 CEP**
- Singapore Airlines
Climate impact: 620 kg CO₂ - 56 CEP**
- Average airline
Climate impact: 605 kg CO₂ - 57 CEP**

*The displayed airlines are based on the last flight schedule. The current flight schedule might deviate from that (i.e. the airline does currently not operate on this flight route).