The train zone map

Erasmus University Rotterdam
Make it happen.

The trainzone map

- Always train
- Usually train
- Train possible
- Schiphol Airport
- Rotterdam Airport

- Where are you travelling to?
- Train Zone
- Legend

Train travel costs about **90% less CO_2** than air travel

Travel has a major contribution to the carbon footprint of universities. The University of Ghent estimated that almost 15% of its total CO_2 emissions are caused by travel, mostly within Europe https://www.ugent.be. Especially air travel has high carbon costs. For example, a return trip by air from Amsterdam to Madrid costs more than 0.8 tons CO_2. This is equivalent to the CO_2 emission from the average use of a car (15,000 km/yr) for five months.

Travel revisited

The average EU citizen has a carbon footprint of 7.2 tons CO_2 per year https://ec.europa.eu/eurostat. In order to achieve the 2015 Paris Agreement's goals of keeping global warming to within 2°C above the pre-industrial level, each person on Earth has a yearly budget of about 2.3 tons CO_2 www.atmosfair.de. To keep to this budget, we need to reduce our CO_2 emission substantially, a daunting task. For people working at Erasmus Universiteit Rotterdam, one way to do this is by revisiting the way we travel.

Flying less is the most effective way to reduce your carbon footprint

The most important change is to fly less. The further you travel, the more CO_2 you produce. A return trip from Amsterdam to Singapore produces 4.9 tons of CO_2. Thus, limiting long-distance travel is key. Within Europe, an important step is to travel by train instead of by air. CO_2 emissions from train travel are 7 to 11 times lower than from travel by air www.milieucentraal.nl. This Train Zone Map provides information about travelling by train instead of by air to the most common destinations in Europe.

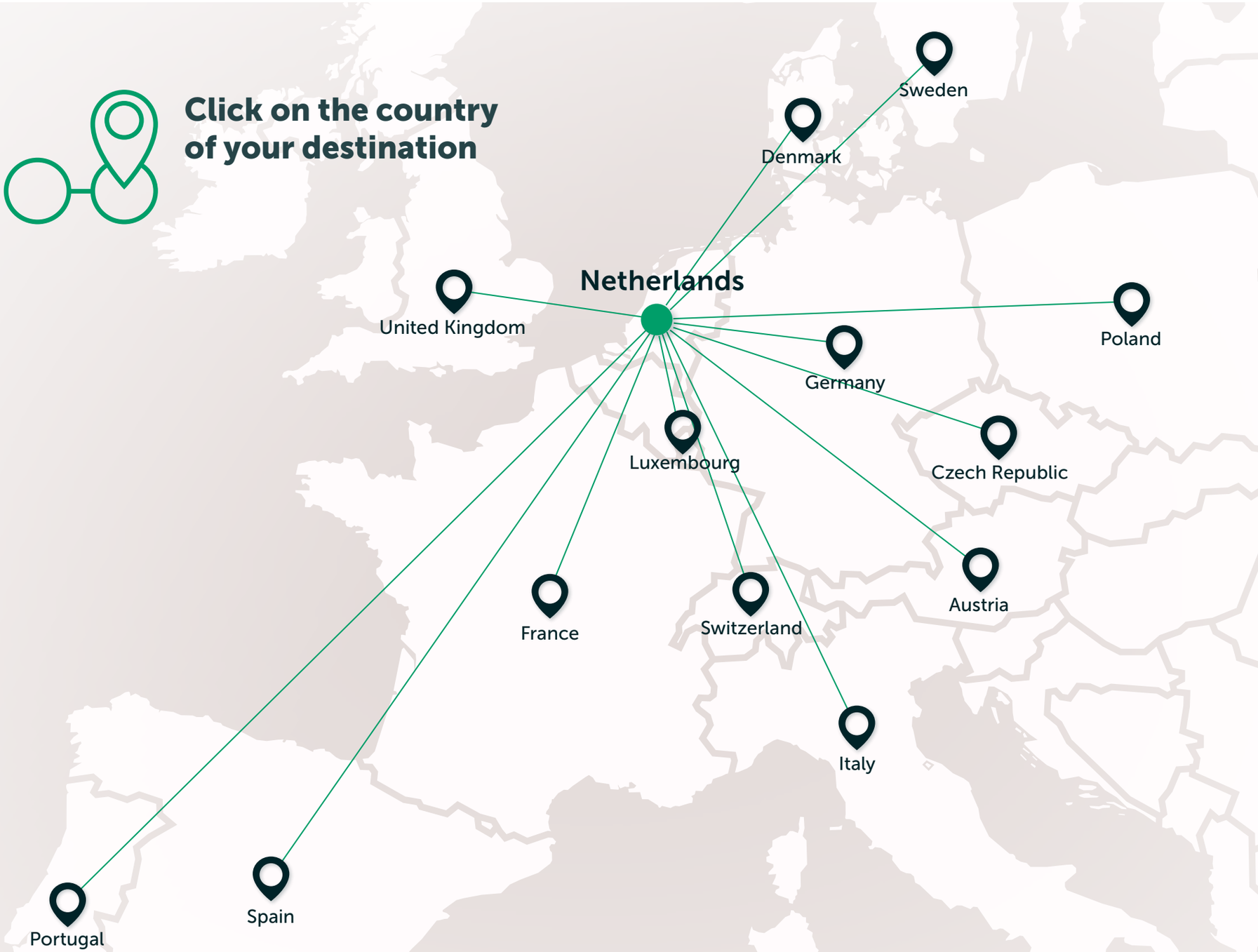
Where are you travelling to?

Are you travelling within Europe? This map provides insight into destinations that are easily accessible by train.

Click on the country of your destination. You will reach a page for the country you have selected. For each destination you will find information on:

- The total travel time from Rotterdam Central Station to the centre of the city you are travelling to;
- The level of comfort on your journey: how many times you have to transfer?;
- The CO_2 emission of your journey.

Click on the country of your destination



The train zone

TRAIN ADVICE	FROM SCHIPHOL (S) or ROTTERDAM AIRPORT (R)	DESTINATION	TRAVEL TIME			CO_2 EQUIVALENT EMISSION (KG)			NUMBER OF TRANSFERS		
		Country	✈	🚆	Difference	✈	🚆	Difference	✈	🚆	Difference
		GERMANY									
🚆	S	Berlin	5:05	7:30	2:25	171	19	152	3	2	-1
🚆	S	Bonn	6:50	4:15	2:35	217	8	209	2	2	0
🚆	S	Bremen	4:25	5:00	0:35	82	13	69	2	3	1
🚆	S	Frankfurt	4:40	5:00	0:20	109	12	97	2	2	0
🚆	S	Freiburg	5:20	7:00	1:40	170	19	151	2	3	1
🚆	S	Hamburg	5:00	6:00	1:00	109	15	94	2	3	1
🚆	S	Hanover	4:35	5:00	0:25	98	12	86	2	1	-1
🚆	S	Leipzig	6:20	8:30	2:10	165	22	143	3	2	-1
🚆	S	Munich	5:15	8:30	3:15	199	24	175	2	2	0
🚆	S	Nuremberg	5:00	7:00	2:00	161	18	143	3	2	-1
🚆	S	Stuttgart	5:00	6:15	1:15	150	16	133	2	2	0

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		Country	✈	🚆	Difference	✈	🚆	Difference	✈	🚆	Difference
		UNITED KINGDOM									
🟠	S	Birmingham	4:40	6:00	1:20	137	18	119	2	3	1
🟠	S	Bristol	5:00	6:10	1:10	156	20	135	2	3	1
🟢	S	Cambridge	4:40	6:00	1:20	97	16	81	2	2	0
🟠	S	Cardiff	5:20	7:15	1:55	168	20	148	3	3	0
🔴	S	Edinburgh	5:30	10:30	5:00	196	30	166	2	3	1
🟠	R	Edinburgh	4:10	10:30	6:20	198	30	168	3	3	0
🔴	S	Glasgow	5:25	9:30	4:05	212	32	180	2	3	1
🟠	R	Glasgow	4:05	9:30	5:25	213	32	181	3	3	0
🟠	S	Liverpool	5:15	7:30	2:15	161	22	140	3	3	0
🟠	S	Leeds	5:00	7:30	2:30	137	23	113	3	2	-1
🟢	S	London (City)	4:45	4:30	0:15	107	14	92	2	1	-1
🟢	R	London (City)	3:30	4:30	1:00	94	14	80	2	1	-1
🔴	S	Manchester	4:55	7:00	2:05	147	23	124	2	3	1
🟠	S	Newcastle	4:55	8:00	3:05	154	25	129	2	2	0
🟢	S	Oxford	5:10	6:00	0:50	127	17	111	3	3	0
🟢	S	Plymouth	6:50	8:30	1:40	198	23	175	3	3	0
🔴	S	Southampton	4:50	6:15	1:25	147	17	129	2	4	2
🟠	S	York	4:55	7:00	2:05	130	23	106	3	2	-1

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		Country	✈	🚆	Difference	✈	🚆	Difference	✈	🚆	Difference
		FRANCE									
🚆	S	Belfort	6:05	6:45	0:40	163	28	135	3	4	1
🚆	S	Bordeaux	5:40	5:35	0:05	276	30	247	2	2	0
🚆	S	Brest	7:40	7:40	0:00	238	31	207	4	2	-2
🚆	S	Clermont-Ferrand	7:35	7:35	0:00	222	25	197	3	3	0
🚆	S	Compiègne	5:55	5:00	0:55	108	14	94	3	1	-2
🚆	S	Lille	8:05	2:15	5:50	71	6	65	3	1	-2
🚆	S	Lyon	5:40	5:30	0:10	219	24	195	3	1	-2
🚆	S	Marseille	5:25	7:00	1:35	301	33	267	2	2	0
🚆	S	Montpellier	5:30	7:50	2:20	291	33	258	2	2	0
🚆	S	Nantes	5:55	6:00	0:05	219	23	197	3	2	-1
🚆	S	Paris	5:10	3:15	1:55	132	12	120	2	1	-1
🚆	S	Rennes	5:10	6:00	0:50	198	23	175	2	2	0
🚆	S	Rouen	6:55	5:00	1:55	126	14	112	3	2	-1
🚆	S	Strasbourg	5:45	5:00	0:45	139	25	114	2	2	0
🚆	S	Toulouse	7:25	8:15	0:50	300	36	263	2	2	0
🚆	S	Troyes	6:55	6:00	0:55	137	17	121	3	1	-2

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		Country	✈	🚆	Difference	✈	🚆	Difference	✈	🚆	Difference
		DENMARK									
🚆	S	Aalborg	4:45	13:00	8:15	182	25	158	2	4	2
🚆	S	Aarhus	7:55	11:15	3:20	162	23	139	4	3	-1
🚆	S	Copenhagen	4:45	12:00	7:15	185	28	156	2	4	2
🚆	S	Odense	6:15	10:45	4:30	186	25	161	2	4	2
		SWEDEN									
🚆	S	Gothenburg	4:40	16:00	12:40	161	36	125	2	5	3
🚆	S	Malmö	8:40	12:45	4:05	328	23	305	3	5	2
		ITALY									
🚆	S	Milan	5:15	12:30	7:15	166	33	133	2	3	1
🚆	S	Turin	5:40	10:15	4:35	161	37	124	3	3	0
🚆	S	Venice	5:15	17:00	11:45	189	40	149	2	3	1
		SPAIN									
🚆	S	Barcelona	5:45	13:45	8:00	248	41	207	2	4	2
🚆	S	Madrid	6:30	15:00	8:30	297	52	245	2	3	1
		PORTUGAL									
🚆	S	Lisbon	6:40	23:45	17:05	373	77	297	2	5	3
		POLAND									
🚆	S	Kraków	5:45	16:15	10:30	216	38	178	3	3	0

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		Country	✈	🚆	Difference	✈	🚆	Difference	✈	🚆	Difference
		LUXEMBOURG									
🚆	S	Luxembourg	4:35	5:30	0:55	95	11	84	2	2	0
		SWITZERLAND									
🚆	S	Basel	4:45	6:45	2:00	169	20	149	3	2	-1
🚆	S	Bern	6:20	8:15	1:55	170	23	147	3	3	0
🚆	S	Geneva	4:50	6:30	1:40	206	28	178	2	2	0
🚆	S	Zürich	4:50	7:30	2:40	183	23	160	2	2	0
		AUSTRIA									
🚆	S	Innsbruck	5:15	10:25	5:10	242	27	215	3	3	0
🚆	R	Innsbruck	3:35	10:25	6:50	213	27	186	3	3	0
🚆	S	Salzburg	5:10	11:00	5:50	230	26	203	2	3	1
🚆	R	Salzburg	3:25	11:00	7:35	228	27	201	2	3	1
🚆	S	Vienna	5:25	12:00	6:35	229	32	198	2	2	0
		CZECH REPUBLIC									
🚆	S	Prague	5:35	12:00	6:25	211	30	181	3	3	0

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Legend

The Train Zone map – destinations

This map only displays a selection of destinations in Europe. If you have any additions or alterations, please e-mail them to sustainable@eur.nl

Train travel time

The train travel times are based on the shortest travel time. All journeys are calculated from Rotterdam Central Station (8.00 a.m.) to the centre of the city you are travelling to. Current search results may differ from the travel time displayed in this document.

Travel time by air

Travel times by airplanes are based on flight duration + travel time (to and from the airport) + waiting time (check-in and customs between 1:15 - 2:30 hr). All journeys are calculated from Rotterdam Central Station to the centre of the city you are travelling to.

Number of transfers by train

The number of transfers has been based on the recommended travel time (source Google Maps - departure 8.00 a.m.) and the lowest number of transfers.

Number of transfers aeroplane

The number of transfers for travelling by air include transfers to train/taxi/shuttle to get from Rotterdam to the airport and from the airport to the centre of the city.

CO_2 emission (kg) flying versus travelling by train.

The CO_2 emission has been calculated by multiplying 0.026 (WTW* of Train International) or 0.238 (80% of WTW of Airplane Regional < 700 km) or 0.160 (80% of WTW of Airplane Europe between 700 – 2.500 km) with the number of kilometers from Rotterdam Airport or Schiphol Airport to the destination. The WTW values are from www.co2emissiefactoren.nl.

* WTW = Well to Wheel or source to wheel. This encompasses all emissions from energy generation to consumption.

Always train Usually train Train possible

Always by train: (travel time train is no more than by plane + 25% OR travel time by train is 6 hours at most) AND the number of transfers is no higher than travel by plane.

Usually by train: (travel time train is no more than by plane + 25% OR travel time by train is 6 hours at most) BUT the number of transfers is higher than
travel by plane.

Usually by train: (travel time train is more than by plane + 25% OR travel time by train is more than 6 hours) BUT the number of transfers is no higher than travel by plane.

Train possible: (travel time train is more than by plane + 25% OR travel time by train is more than 6 hours) AND the number of transfers is higher than travel by plane.

The trainzone map

This Train Zone map is based on an idea and format of Utrecht University and of Erasmus MC

Reliable sites for booking and planning:
www.bahn.de & www.nsinternational.nl