

VIIA certifies that

Lankveld

Logistics BV

by using the services of the Lorry-Rail Rail Motorway, has reduced its carbon footprint by:

- 1 602 039,7 Kg

国

NUMBER OF JOURNEY

1608

FROM

01.01.2022

TO

31.12.2022

MM -

Reynald NICOLAS



Daniel Lebreton
Sales and Marketing Director



INFORMATION ON THE QUANTITY OF GREENHOUSE GASES EMITTED AND PREVENTED DURING THE TRANSPORT SERVICE

GENERAL METHODOLOGY

To compare CO₂e emissions between a Rail Motorway and an equivalent road service, we used the methodological guide for GHG information for transport services (September 2018 version) prepared by ADEME, pursuant to Article L. 1431-3 of the French Transport Code.

GREENHOUSE GAS EMISSIONS FOR A RAIL SERVICE

For emissions relating to a Rail Motorway journey, the calculation takes into account the following elements:

- The mileage travelled by the train on the rail network
- The average weight of a semi-trailer or ILU
- The rail electricity emission factors* in each country for electricity consumption

CO₂e** emission rates per t.km (Source: Base Carbone, 2021)

Rail Journey in France 0,000107 kg CO₂e/t.km

The CO2 emission factor was calculated based on the electricity mix of each country with the Base Carbone® data from ADEME (French Department of environment and energy).

GREENHOUSE GAS EMISSIONS FOR AN EQUIVALENT ROAD SERVICE

For emissions relating to a road journey, the calculation takes into account the following elements:

- The average mileage travelled by road: average between the fastest and the cheapest route (Source: Mappy)
- The fuel consumption rate of a standard diesel fuel goods vehicle (Source: ADEME, 2018)

Consumption rate

Articulated truck 40 tons GCWR – Miscellaneous goods/long distance (Diesel fuel): 0.342 l/km

• Emission factors for diesel fuel (Source: Base Carbone, 2021)

CO2e emission factor (Upstream phase and operation)

Diesel Fuel B7: 3,1 kg CO_{2e}/lt

OVERVIEW OF GREENHOUSE GAS EMISSIONS FOR RAIL SERVICES AND ROAD SERVICE

	EQUIVALENT ROAD SERVICE	
(KgCO ₂ e)	(KgCO ₂ e)	(KgCO ₂ e)
33,8	1 237,4	1 203,6
27,0	1 023,3	996,3
17,3	179,6	162,4
42,4	1 085,8	1 043,4
20,0	782,7	762,7
14,5	643,9	629,4
30,5	1 140,4	1 109,9
22,1	874,9	852,8
26,0	943,3	917,3
	RAIL SERVICE PER ILU (KgCO ₂ e) 33,8 27,0 17,3 42,4 20,0 14,5 30,5 22,1	(KgCO ₂ e) PER ILU (KgCO ₂ e) 33,8 1 237,4 27,0 1 023,3 17,3 179,6 42,4 1 085,8 20,0 782,7 14,5 643,9 30,5 1 140,4 22,1 874,9

GHG: Green house gas. The main greenhouse gases are:

CO2, CH4, N2O, HFC, PFC, SF6, NF3

ILU = intermodal transport unit



^{*} The emission factors vary, in particular, according to the energy mix of each country and therefore change annually.

^{**} CO2e: CO2 equivalent.