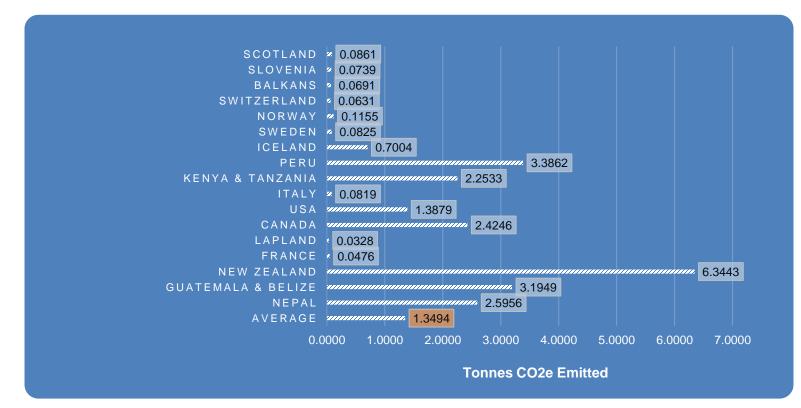
GHG Emissions Estimate

Native, a Public Benefit Corporation is happy to provide a free estimate of emissions to **Kaaiman Reizen**

Emissions Timeframe & Boundary: Per-person travel emissions estimated by trip destination

Emissions Estimate Breakdown:





Emission Source	Tonnes CO2e per person	Details and Assumptions
Scotland	0.0861	
Ground Travel	0.0478	1) 30mpg, 6 people per vehicle
Rail Travel	0.0014	1) Applied emissions factor for "UK National Rail"
Passenger Ferry Travel	0.0369	1) Applied "Car passenger" emissions factor to 1/6 of the total ferry travel and "Foot passenger" emissions factor to 5/6 of the total ferry travel to estimate per-person emissions for groups of 6 people per vehicle.
Slovenia	0.0739	
Ground Travel	0.0738	1) 30mpg, 6 people per vehicle
Rail Travel	0.0001	1) Applied emissions factor for "UK International Rail"
Balkans	0.0691	
Ground Travel	0.0601	1) 30mpg, 6 people per vehicle
Rail Travel	0.0090	1) Applied emissions factor for "UK International Rail"
Switzerland	0.0631	
Ground Travel	0.0630	1) 30mpg, 6 people per vehicle
Rail Travel	0.0001	1) Applied emissions factor for "UK International Rail"
Norway	0.1155	
Ground Travel	0.1001	1) 30mpg, 6 people per vehicle
Passenger Ferry Travel	0.0154	1) Applied "Car passenger" emissions factor to 1/6 of the total ferry travel and "Foot passenger" emissions factor to 5/6 of the total ferry travel to estimate per-person emissions for groups of 6 people per vehicle.
Sweden	0.0825	
Ground Travel	0.0802	1) 30mpg, 6 people per vehicle



Passenger Ferry Travel	0.0023	1) Applied "Car passenger" emissions factor to 1/6 of the total ferry travel and "Foot passenger" emissions factor to 5/6 of the total ferry travel to estimate per-person emissions for groups of 6 people per vehicle.
Iceland	0.7004	
Ground Travel	0.0580	1) 30mpg, 6 people per vehicle
Commercial Air Travel	0.6425	1) Applied economy, medium haul flight emissions factor 2) Applied a Radiative Forcing Factor of 2 to the resulting emissions, effectively doubling the emissions estimate. Accounting for increased radiative forcing in aviation is recommended and is intended to capture the additional environmental impact of aviation, however it is optional and if preferred we can adjust this. For more information radiative forcing in the context of aviation see: <u>IPCC: Aviation</u> <u>and the Global Atmosphere</u>
Peru	3.3862	
Ground Travel	0.0192	1) 23mpg, 6 people per vehicle
Bus Travel	0.0791	1) Applied UK Coach bus emissions factor
Commercial Air Travel	3.2879	1) Applied economy, long haul flight emissions factor 2) Applied a Radiative Forcing Factor of 2 to the resulting emissions, effectively doubling the emissions estimate. Accounting for increased radiative forcing in aviation is recommended and is intended to capture the additional environmental impact of aviation, however it is optional and if preferred we can adjust this. For more information radiative forcing in the context of aviation see: <u>IPCC: Aviation</u> and the Global Atmosphere
Kenya & Tanzania	2.2533	



Ground Travel	0.0542	1) Minibus - 14mpg, 6 people per vehicle 2) Toyota coaster - 18mpg, 6 people per vehicle
Bus Travel	0.0150	1) Applied UK Coach bus emissions factor
Commercial Air Travel	2.1827	 Applied economy, long haul flight emissions factor for longer flight leg Applied economy, medium haul flight emissions factor for shorter flight leg Applied a Radiative Forcing Factor of 2 to the resulting emissions, effectively doubling the emissions estimate. Accounting for increased radiative forcing in aviation is recommended and is intended to capture the additional environmental impact of aviation, however it is optional and if preferred we can adjust this. For more information radiative forcing in the context of aviation see: <u>IPCC: Aviation</u> and the Global Atmosphere
Passenger Ferry Travel	0.0014	1) Applied Foot passenger emissions factor for ferry travel
Italy	0.0819	
Ground Travel	0.0819	1) 30mpg, 6 people per vehicle
USA	1.3879	
Ground Travel	0.1183	1) 17mpg, 6 people per vehicle



Commercial Air Travel	1.2695	1) Applied economy, long haul flight emissions factor 2) Applied a Radiative Forcing Factor of 2 to the resulting emissions, effectively doubling the emissions estimate. Accounting for increased radiative forcing in aviation is recommended and is intended to capture the additional environmental impact of aviation, however it is optional and if preferred we can adjust this. For more information radiative forcing in the context of aviation see: <u>IPCC: Aviation</u> <u>and the Global Atmosphere</u>
Canada	2.4246	
Ground Travel	0.0947	1) 17mpg, 6 people per vehicle
Commercial Air Travel	2.3254	1) Applied economy, long haul flight emissions factor 2) Applied a Radiative Forcing Factor of 2 to the resulting emissions, effectively doubling the emissions estimate. Accounting for increased radiative forcing in aviation is recommended and is intended to capture the additional environmental impact of aviation, however it is optional and if preferred we can adjust this. For more information radiative forcing in the context of aviation see: <u>IPCC: Aviation</u> <u>and the Global Atmosphere</u>
Passenger Ferry Travel	0.0044	1) Applied "Car passenger" emissions factor to 1/6 of the total ferry travel and "Foot passenger" emissions factor to 5/6 of the total ferry travel to estimate per-person emissions for groups of 6 people per vehicle.
Lapland	0.0328	
Ground Travel	0.0094	1) 23mpg, 6 people per vehicle
Rail Travel	0.0234	1) Applied emissions factor for "UK International Rail"
France	0.0476	



Ground Travel	0.0476	1) 30mpg, 6 people per vehicle
New Zealand	6.3443	
Ground Travel	0.1188	1) 20mpg, 6 people per vehicle
Commercial Air Travel	6.2180	1) Applied economy, long haul flight emissions factor 2) Applied a Radiative Forcing Factor of 2 to the resulting emissions, effectively doubling the emissions estimate. Accounting for increased radiative forcing in aviation is recommended and is intended to capture the additional environmental impact of aviation, however it is optional and if preferred we can adjust this. For more information radiative forcing in the context of aviation see: <u>IPCC: Aviation</u> <u>and the Global Atmosphere</u>
Passenger Ferry Travel	0.0074	1) Applied "Car passenger" emissions factor to 1/6 of the total ferry travel and "Foot passenger" emissions factor to 5/6 of the total ferry travel to estimate per-person emissions for groups of 6 people per vehicle.
Guatemala & Belize	3.1949	
Ground Travel	0.0919	1) 14mpg, 6 people per vehicle
Commercial Air Travel	3.1031	1) Applied economy, long haul flight emissions factor 2) Applied a Radiative Forcing Factor of 2 to the resulting emissions, effectively doubling the emissions estimate. Accounting for increased radiative forcing in aviation is recommended and is intended to capture the additional environmental impact of aviation, however it is optional and if preferred we can adjust this. For more information radiative forcing in the context of aviation see: <u>IPCC: Aviation</u> and the Global Atmosphere
Nepal	2.5956	



Ground Travel	0.0118	1) 29mpg for Suzuki Alto (oud model), 6 people per vehicle 2) 16mpg for Toyota Hiace, 6 people per vehicle
Bus Travel	0.0102	1) Applied UK Coach bus emissions factor
Commercial Air Travel	2.5736	 Applied economy, long haul and medium haul flight emissions factors Applied a Radiative Forcing Factor of 2 to the resulting emissions, effectively doubling the emissions estimate. Accounting for increased radiative forcing in aviation is recommended and is intended to capture the additional environmental impact of aviation, however it is optional and if preferred we can adjust this. For more information radiative forcing in the context of aviation see: <u>IPCC: Aviation</u> <u>and the Global Atmosphere</u>
Average	1.3494	



Emissions Estimation Process:

Native conducts emissions calculations in accordance with the guidance of the <u>WRI GHG Protocol</u>. Estimates of emissions are calculated based on the data provided to us, and as such are limited by the completeness and accuracy of the data we receive. We utilize emissions factors from the <u>US EPA's GHG</u> <u>Emission Factors Hub</u>, the <u>UK DEFRA's Government conversion factors for company reporting of</u> <u>greenhouse gas emissions</u>, the <u>US EIA's Carbon Dioxide Emissions Coefficients</u>, as well as other publicly available sources. When the data we receive cannot be directly converted to GHG emissions using the emissions factors available to us, we rely on additional public sources to approximately convert the data we receive into a form which can be converted to GHG emissions. For example, when a facility's actual energy consumption is not known, but location and square footage are known, we may use the <u>US EIA'S Commercial Buildings Energy Consumption Survey (CBECS)</u> data to estimate the energy consumption from your facility. When necessary, we may also make assumptions to help complete the data we receive, or otherwise to assist in calculating an estimate of GHG emissions. Any such assumptions we make are reported to the recipient of the GHG emissions estimate, and any sources we use outside of the examples previously mentioned can be shared upon request.

Please note that the emissions estimates shared in this report may not be 100% accurate or complete. Calculations are intended solely for estimation purposes. Native utilizes up-to-date, publicly available emissions factors from credible entities to estimate your emissions. While we do our best to ensure our emissions estimates are accurate, emissions factors are based on averages, and the calculation of emissions requires the use of assumptions.

Native is not responsible for any errors or omissions in our estimates, or for any resulting actions taken based on the estimated volume of emissions. All information in this report is provided "as is" with no guarantee of completeness, accuracy, and without warranty of any kind. The creator of this report is in no way liable for any actions that might be taken by users.

