

Additional problem

The end is in sight. You are close to completing your mission successfully. There is just one more challenge in your way – you must get home.

You need to plan your journey back to the UK HQ in London from Caracas, Venezuela. There are four people in your group and you will all travel together if possible.

You can break your journey at any point or use different types of transport at different stages if you wish.

The speed and cost of your journey are not important. Your main aim is to keep your 'carbon footprint' as low as possible to limit damage to the environment. Your 'carbon footprint' is the total amount of carbon dioxide (CO₂) you produce on the journey. It depends on the type of transport you use and the distance you travel.

Here are some facts to help you to plan your journey.

Sea travel

For each passenger, the liner Queen Catherine gives out 0.43 kg of CO₂ per sea mile.

Air travel

For each passenger, an aeroplane typically produces from 0.24 kg CO₂ per mile for short flights to 0.18 kg CO₂ per mile for long-haul flights.

Rail travel

For each passenger, commuter rail and subway trains on average give out 0.16 kg of CO₂ per mile, and long distance trains give out 0.19 kg of CO₂ per mile.

Bus travel

For each passenger, inner city commuting buses give out 0.3 kg of CO₂ per mile, and long distance bus trips emit 0.08 kg of CO₂ per mile.

For every 750 miles of travel by bus, you will need an overnight hotel stop.

Hotel rooms

A one-night stay in a room at an average hotel produces 29.53 kg CO₂ whereas an upmarket hotel room produces 33.38 kg CO₂.

Approximate distances

By air	Caracas	Miami	New York
Miami	1371 miles		
New York	2136 miles	2000 miles	
London	4690 miles	4463 miles	3487 miles

By sea	Puerto la Cruz	Miami	New York
Southampton	4020 sea miles	3882 sea miles	3156 sea miles

By road or rail	Caracas	Miami	Southampton
Puerto la Cruz	155 miles	-	-
New York	-	1330 miles	-
London	-	-	111 miles

Puerto la Cruz, on the Venezuelan coast, is the nearest port to Caracas.