

## CO2 Calculation

### Summary:

- Analytix CO2 is calculated using the latest DEFRA factors
- We use the [Great Circles](#) calculation for the obtaining the distance
- The booking class is taken into account.
- RF stands for Radiative Forcing (so this is anything that is not directly caused by the travel itself e.g. any light reflecting off the Aircraft and back into the atmosphere).

In greater detail then the CO2 report takes into account whether a sector is Domestic, Short Haul or Long Haul based on the DEFRA defined methodology of:

Sector origin & destination is within the TMC's country = Domestic

Not domestic & < 3,700 Kilometres = Short-haul

Not domestic & >3,700 Kilometres = Long-haul

The calculation will also take into account the class of service and whether radiative forcing has been included or excluded in the criteria selection.

The report is a sector related report that will calculate and report the mileage and CO2 for each sector travelled on a given trip.

For example; if a trip's route is MAN-LHR-JFK-LHR-MAN the CO2 will be calculated on each sector (i.e MAN-LHR / LHR-JFK / JFK-LHR / LHR-MAN), not just the distance between the primary origin and primary destination.

NOTE – To ensure consistency and reliability of calculations; mileage between airports is calculated by Analytix using the longitude and latitude of the original and destination airports, the system does not rely on the GDS or back office calculated mileages.