

Designing Our Tomorrow

Business \downarrow

Understand it

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Apply it

See examples

Transport assumptions

In all figures quoted, gCO2 is used to mean the equivalent global warming potential, measured in grams of carbon dioxide.

According to Footprint expert from the Carbon trust (Database version 3.3), an average passenger diesel car causes about 200 gCO2 per kilometre travelled. For freight, an average UK truck causes 150 gCO2 per kilometre travelled per tonne carried. Average container shipping causes 15 gCO2 per kilometre travelled per tonne carried.

Therefore, a 2 mile round trip in a car causes about 635 gCO2, which is equivalent to a 1 kg product travelling 2600 miles in a truck or 26,000 miles in a ship.

According to the UK environment agency's Life Cycle Assessment of Supermarket Carrier Bags, a typical supermarket bag is made of 8.12g of High-density Polyethylene (HDPE). The report quotes a global warming potential of 2.082 kgCO2 to carry a standardised amount of shopping, which equates to 82.14 HDPE bags, assuming the bags are not re-used. This works out to an equivalent of 25 gCO2 per bag.

Therefore, a 2 mile round trip in a car that causes 635 gCO2 is equivalent to 25 carrier bags.

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