

Food Miles Issues & Factoids

<p><u>Deforestation</u> contributes to around 20% of global greenhouse gas emissions, more than the world's transport sector. Also once cut, trees can't absorb CO₂. An area of rainforest the size of 10 football pitches is destroyed every second!!</p>	<p><u>Ozone:</u> is created and destroyed by ultraviolet light from the sun. It is created from oxygen by high energy rays, while low energy rays destroy it. Some ozone is created by man-made air pollution which then reacts with sunlight.</p>
<p><u>Greenhouse Gases (ignoring water vapour)*:</u> CO₂ = 76% Nitrous Oxide = 6% Methane = 13% Fluorocarbons = 5% <small>* Source: www.umich.edu/~gs265/greenhouse.htm</small></p>	<p><u>Nitrous Oxide:</u> 7 – 13 million tonnes released through using nitrogen-based fertilisers, sewage treatment plants (human and animal), and car exhausts. Nitrous oxide is trapped in the atmosphere for 100 years. Nitrogen-based fertiliser use has doubled in last 10 years. Nitrous oxide is used as an anaesthetic and is also called laughing gas.</p>
<p><u>USA</u> emits 25% of global CO₂ emissions.</p>	<p><u>Fluorocarbons:</u> a general term for any group of synthetic organic compounds that contain fluorine and carbon. <u>Chlorofluorocarbons</u> (CFCs) can be easily converted from gas to liquid or liquid to gas. CFCs break down the earth's ozone layer. CFCs are used in aerosols, fridges and air-conditioning systems. <u>Hydrofluorocarbons</u> (HFCs) are a substitute for CFCs that don't break down the ozone but do trap heat in the atmosphere, causing global warming.</p>
<p><u>Farming & Farm animals</u> create 18% of global greenhouse gases.</p>	<p><u>CO₂ global emissions:</u> 8.7 – 9.1 gigatonnes, of which 6.9 – 7.0 are from fossil fuels, 1.8 – 2.0 are from deforestation, and 0.1 from other sources.</p>
<p><u>Human Activity CO₂ causes:</u> Power Plants = 33%, Factories & Home heating systems = 33%, Cars & Trucks = 22%, Major Transportation (air, shipping) = 12%.</p>	<p><u>CO₂ global absorption:</u> 8.7 – 9.7 gigatonnes, of which 4.5 remain in the atmosphere, 2.3 are absorbed by the oceans, and 1.9 – 2.3 are absorbed by vegetation</p>
<p><u>Methane:</u> 350 – 500 million tonnes of gas per year created through livestock, coal-mining, gas & oil exploration, rice-cultivation, rubbish decomposing in landfill. In one day a cow can emit 1/2 kg of methane gas. Methane remains in the atmosphere for 10 years but traps 20 times more heat than CO₂.</p>	

24 Food Miles Facts:

1. 50% of vegetables and 95% of fruit eaten in the UK is imported.	13. As so many people go shopping by car, cars account for 20% of UK food miles emissions.
2. Air transport gives off more CO ₂ than any other form of transport – and an increasing amount of food we eat comes here by air.	14. A 2005 Defra report indicated it may be more energy-efficient to import tomatoes from Spain by lorry than to grow them in a heated greenhouse in the UK.
3. Agriculture and food account for nearly 30% of goods trucked around UK roads.	15. A study in New Zealand concluded that, due to energy-efficiencies of New Zealand farming compared with UK farming, it is actually more energy-efficient to buy New Zealand lamb than UK-reared lamb!!
4. The food we eat accounts for 30% of UK households' impact on climate change.	16. Organic farming uses less energy because intensive farming uses fertilisers and chemicals, the manufacture and use of which creates greenhouse gases.
5. Air-freighted foods account for less than 1% of UK food miles <u>but</u> it is responsible for 11% of CO ₂ emissions from UK food transport.	17. Meat is the most energy-intensive of all foods to produce, taking up larger amounts of water than any other food production.
6. Transport by plane generates 177 times more greenhouse gases than shipping.	18. It takes 2400 litres of water to produce a 150 gram hamburger, compared with 13 litres of water to produce a tomato.
7. 70% of the green beans grown in Kenya are flown to Britain.	19. Processing and packaging contribute to food's carbon footprint, as does keeping it chilled or frozen. All these carbon emissions can be more than those produced by food miles.
8. The annual £200 million fresh fruit & vegetable trade with the UK supports one million people living in Africa.	20. Eating New Zealand-produced apples in July is more energy-efficient than eating stored UK-produced apples due to the energy required to preserve the UK apples.
9. Most Fair Trade fruit, such as pineapples, bananas and mangoes, is transported by sea.	21. Transporting food long distances uses a lot of fuel, whether it travels by air, road or sea. That means a lot of CO ₂ emissions.
10. Food transport is responsible for 25% of the miles clocked up by HGVs on UK roads.	22. Since 1978, the amount of food moved about within the UK has increased by 23% and the average distance for each trip has increased by 50%.
11. Supermarkets have national distribution systems so even food grown near a particular branch may have travelled to a central depot and then back to its place of origin.	23. An area of rainforest the size of 10 football pitches is destroyed every second – and the land is usually used for food production.
12. HGVs transporting food around the UK account for 25% of food miles emissions.	24. Some food packaging is flown from China to London to Africa, then back to London once it is filled with food.