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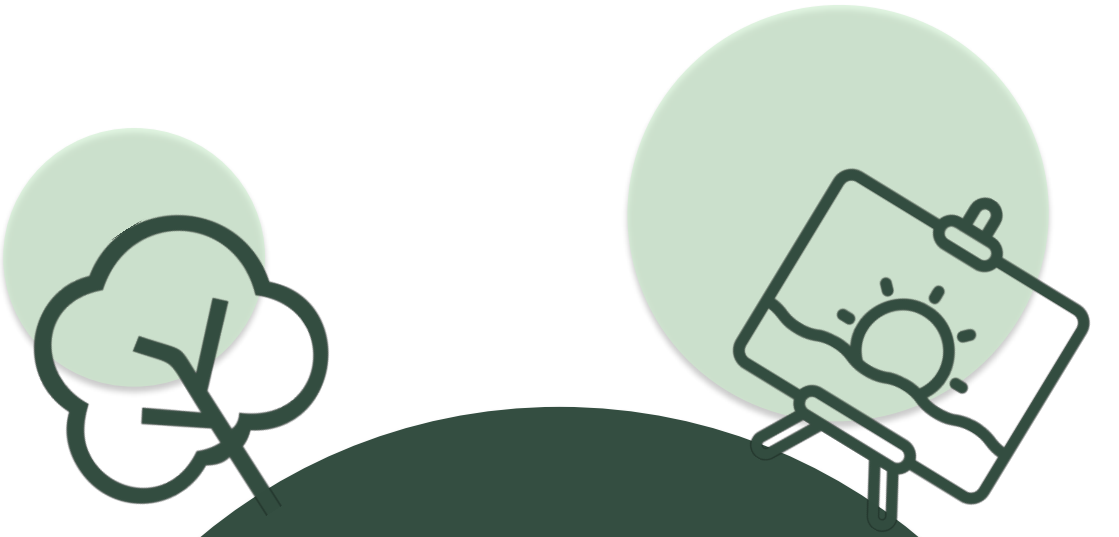
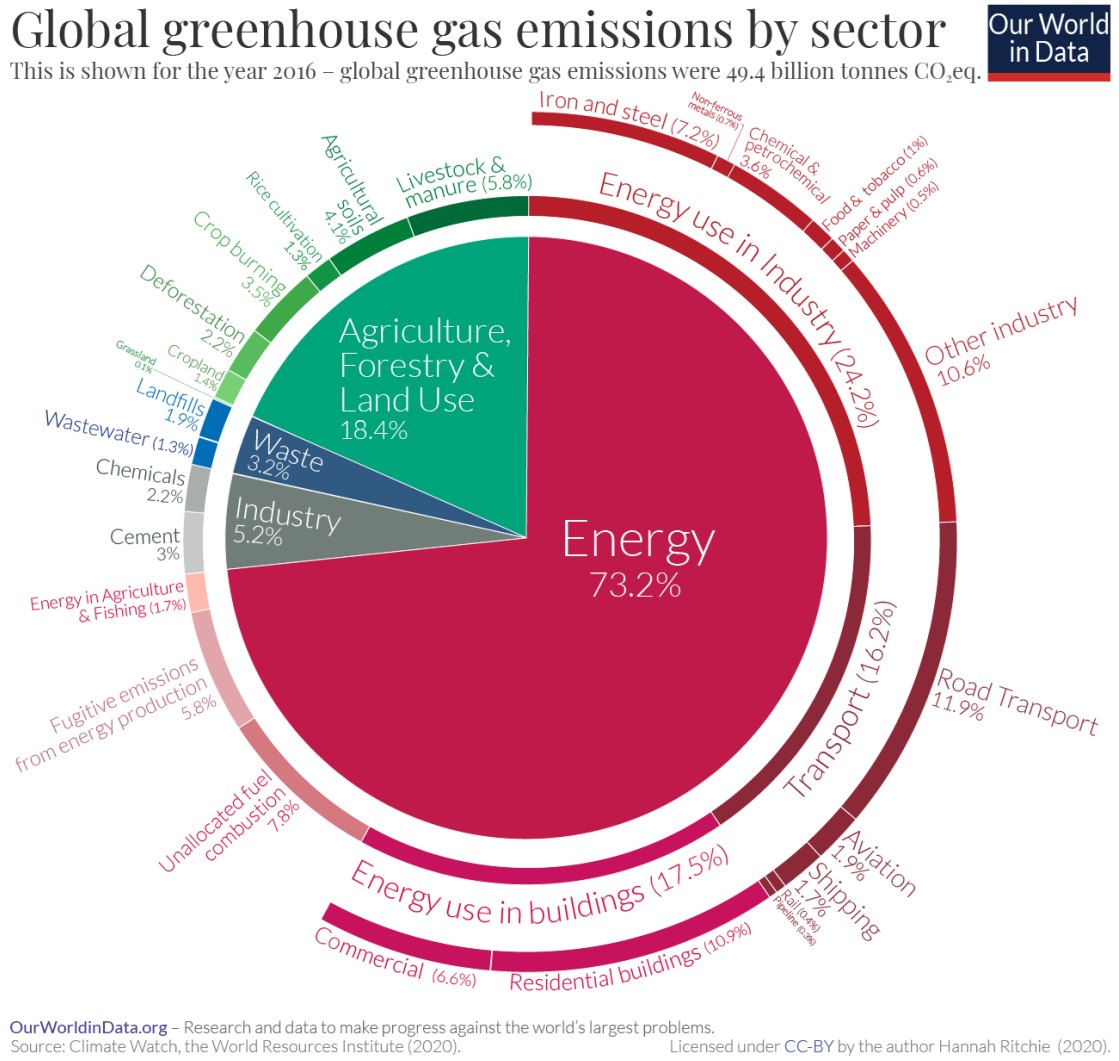
Greenhouse gas emissions
- data -



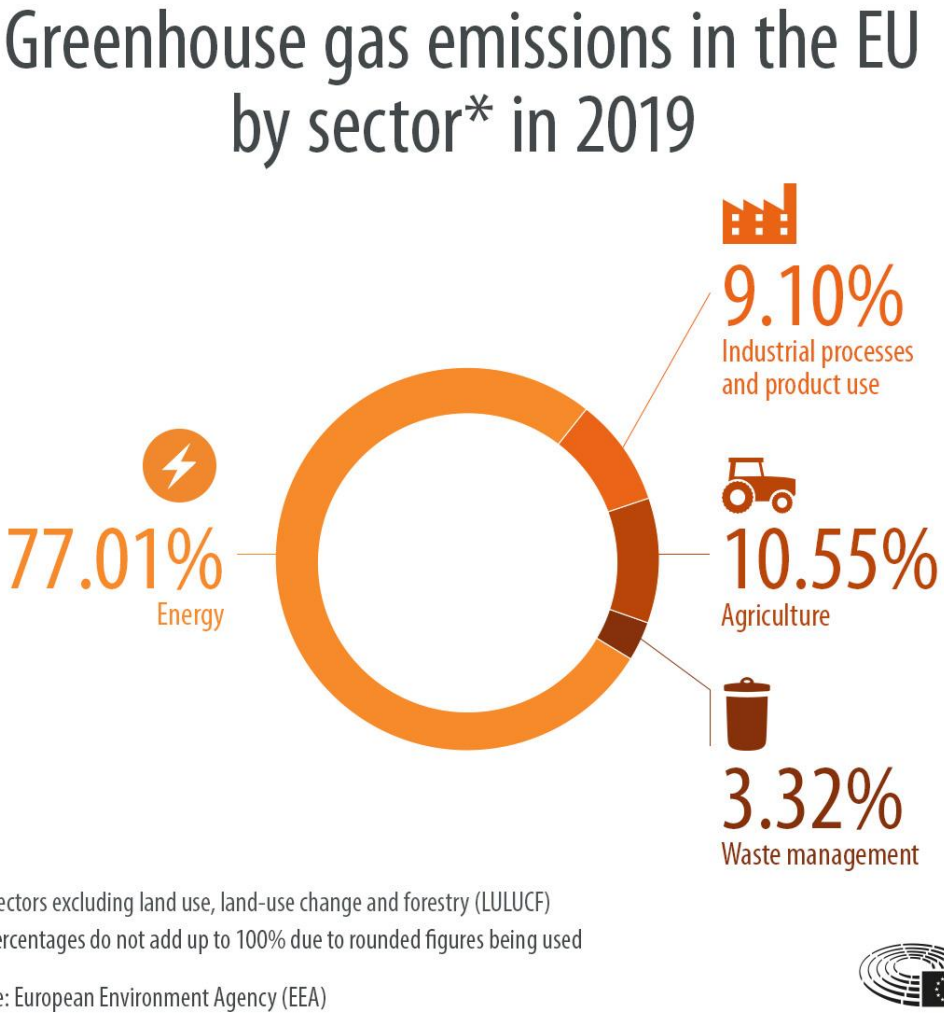
How did we get into trouble

Global greenhouse gas emissions by sector 2020



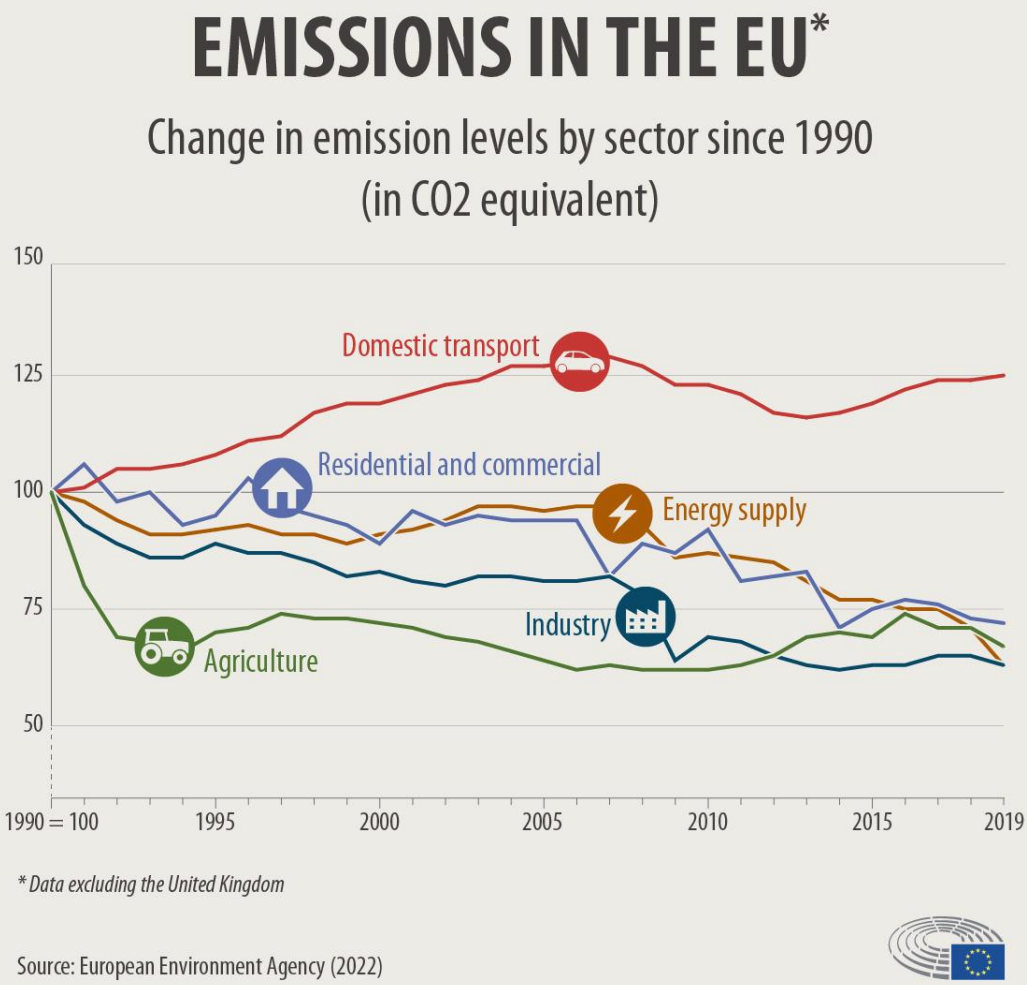
https://ourworldindata.org/emissions-by-sector

EU greenhouse gas emissions by sector 2019



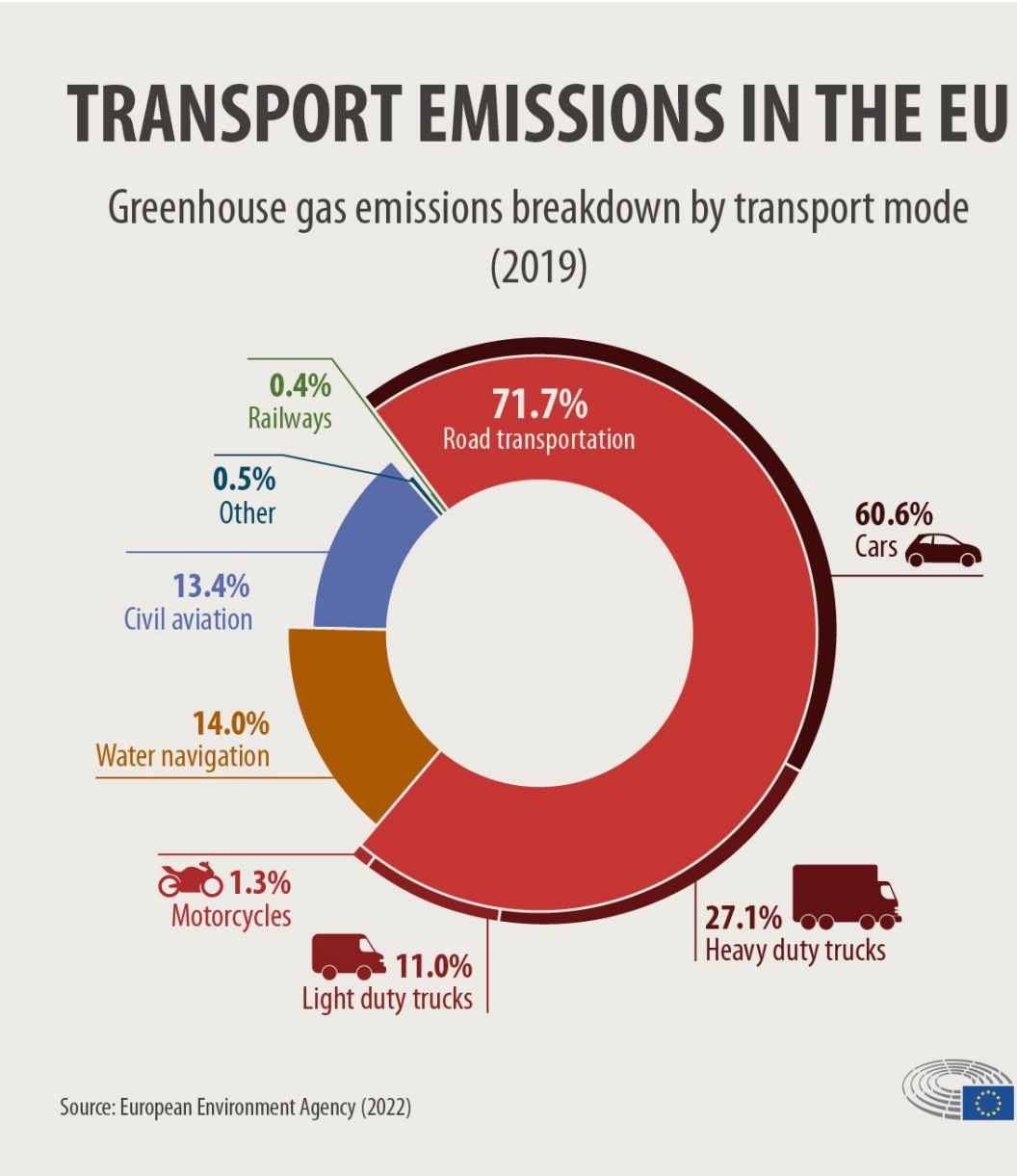
https://www.europarl.europa.eu/news/en/headlines/society/20180706STO07407/eu-progress-towards-2020-climate-change-goals-infographic

EU greenhouse gas emissions by sector 2019



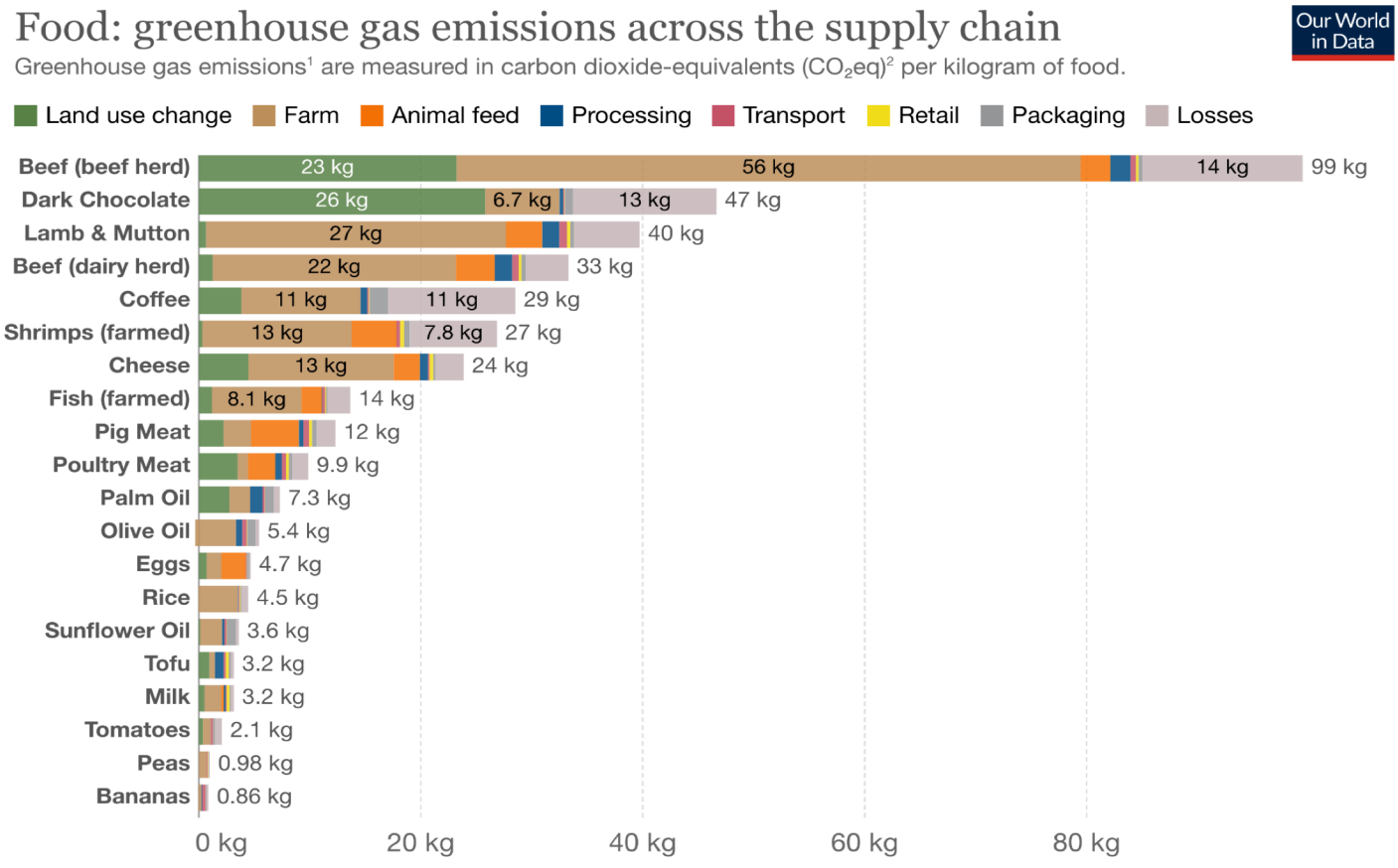
https://www.europarl.europa.eu/news/en/headlines/society/20190313STO31218/co2-emissions-from-cars-facts-and-figures-infographics

EU greenhouse gas emissions by transport 2019



https://www.europarl.europa.eu/news/en/headlines/society/20190313STO31218/co2-emissions-from-cars-facts-and-figures-infographics

Greenhouse gas emissions by agriculture



Source: Joseph Poore and Thomas Nemecek (2018).

OurWorldInData.org/environmental-impacts-of-food • CC BY

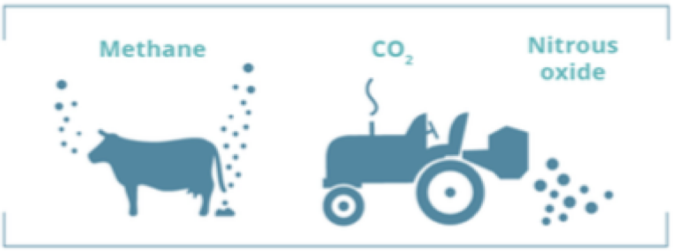
1. Greenhouse gas emissions: A greenhouse gas (GHG) is a gas that causes the atmosphere to warm by absorbing and emitting radiant energy. Greenhouse gases absorb radiation that is radiated by Earth, preventing this heat from escaping to space. Carbon dioxide (CO_2) is the most well-known greenhouse gas, but there are others including methane, nitrous oxide, and in fact, water vapor. Human-made emissions of greenhouse gases from fossil fuels, industry, and agriculture are the leading cause of global climate change. Greenhouse gas emissions measure the total amount of all greenhouse gases that are emitted. These are often quantified in carbon dioxide-equivalents (CO2eq) which take account of the amount of warming that each molecule of different gases creates.

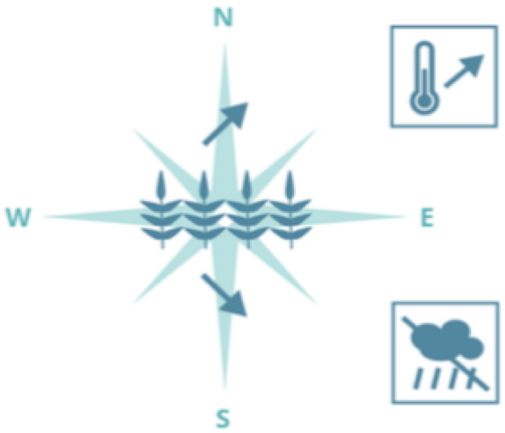
2. Carbon dioxide-equivalents (CO_2eq): Carbon dioxide is the most important greenhouse gas, but not the only one. To capture all greenhouse gas emissions, researchers express them in 'carbon dioxide-equivalents' (CO_2eq). This takes all greenhouse gases into account, not just CO_2. To express all greenhouse gases in carbon dioxide-equivalents (CO_2eq), each one is weighted by its global warming potential (GWP) value. GWP measures the amount of warming a gas creates compared to CO_2. CO_2 is given a GWP value of one. If a gas had a GWP of 10 then one kilogram of that gas would generate ten times the warming effect as one kilogram of CO_2. Carbon dioxide-equivalents are calculated for each gas by multiplying the mass of emissions of a specific greenhouse gas by its GWP factor. This warming can be stated over different timescales. To calculate CO_2eq over 100 years, we'd multiply each gas by its GWP over a 100-year timescale (GWP100). Total greenhouse gas emissions – measured in CO_2eq – are then calculated by summing each gas' CO_2eq value.

https://ourworldindata.org/grapher/food-emissions-supply-chain

EU greenhouse gas emissions by agriculture

Agriculture accounts for 10% of the EU's greenhouse-gas emissions.





-24% From 1990 to 2012, greenhouse-gas emissions from agriculture in the EU decreased by 24%.

In southern Europe extreme heat events and reduced precipitation and water availability are expected to reduce crop yields, while the suitability for growing crops may improve in northern Europe.

Greenhouse-gas emissions from agriculture can be reduced further by:

- Better integration of innovative techniques
- Capturing methane from manure
- More efficient use of fertilisers
- Greater efficiency in meat and dairy production
- Reducing food waste
- Consuming less meat and other products with high carbon footprint

Globally

+14% Between 2001 and 2011, greenhouse-gas emissions from crop and livestock production grew by 14%.

+70% The demand for food is expected to grow by up to 70% in coming decades.

Did you know?

Meat and dairy products have the highest global footprint of carbon, raw materials and water per kilogramme of any food.

Post-farm transport and processing account for only a tiny fraction of the emissions linked to food.

https://www.eea.europa.eu/media/infographics/climate-change-and-agriculture/view

Green Artivism

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