

Local Food Promotes Environmental Sustainability

Greenhouse Gas Emissions

- Short supply chains limit food miles, which reduces transportation distances and decreases carbon emission and utilization of energy resources. Less energy used for food production means more energy available for other necessities, with means more sustainability.
- Reduced carbon footprint with locally produced foods
- Although greenhouse gas emissions are reduced with locally grown produce, it is estimated about only about 11% of emissions come from transportation. But if the carbon footprint worldwide were reduced by 11%, it would make an enormous impact in the environment and increase sustainability.

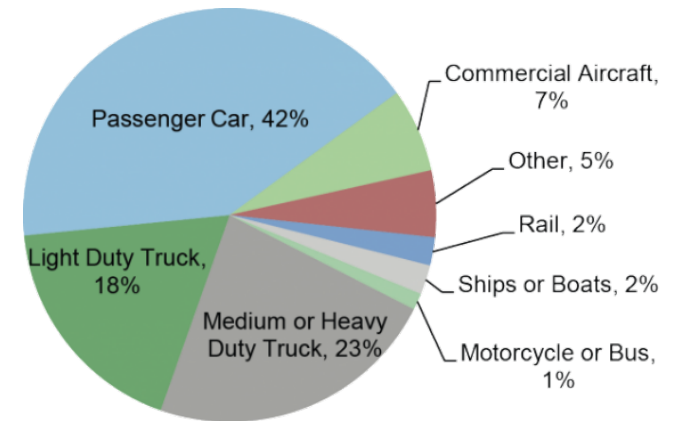


Figure I. A figure from source 3. This is a transportation chart of greenhouse gases emitted by various transportations.

Nutrient Content of Local Food

- Locally produced foods tend to require less preservatives because they do not need to have as long of a shelf life.
- Local foods have higher nutritional value compared to conventionally grown foods (foods produced on large-scale farms) because they likely lack the preservatives needed to travel long distances.

Ecological Impacts of Local Food

- Promotes biodiversity (smaller-scale production allows more control instead of the mass-production of one species that reduces soil nutrition and viability).
- Increases dependence upon the local environment because connectance is reduced within the ecosystem (because there are less links within the ecosystem meaning each organism is more dependent upon the other. This reduces stress upon non-local regions, though.
- Local farms recycle nutrients on a local scale versus a regional scale with larger farms.
- Locally grown foods use the same, if not more, energy per pound produced of food as large farms.

Figure II. This image is from source 2, which is showing tomatoes.



Citations:

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3. Carbon Footprint Factsheet. *Carbon Footprint Factsheet | Center for Sustainable Systems*. [accessed 2019 Mar 31]. <http://css.umich.edu/factsheets/carbon-footprint-factsheet> (Source of the vehicle emissions Chart)
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