



## Dairy Carbon Footprint Just 2% of Nation's Total

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After three years of intensive surveys and analysis, the U.S. dairy industry can now lay claim to a very light carbon footprint.

The number is an underwhelming 2% of total U.S. carbon emissions for fluid milk, with the farm component of that—from growing feed to delivering milk to the farm bulk tank—at about 1.5%.



The actual total number is estimated at 17.6 lb of carbon dioxide (CO<sub>2</sub>) equivalent per gallon of fluid milk consumed. At the farm level, most of the emissions come from “enteric” sources ( i.e. emissions from the rumen as microbes digest feed) and from manure storage. Energy use by processors accounts for most of their emissions. Surprisingly, transportation from farm to processor to supermarket to homes accounts for less than 10% of the total.

The estimates are based on surveys of 500 dairy farms, 50 fluid processing plants, more than 210,000 roundtrips transporting milk from farm to processor with additional estimates from grocery stores to consumers’ home refrigerators.

“What this study does is create a defensible baseline against which the dairy industry can use to define and defend future progress,” says Greg Thoma, a professor of chemical engineering with the University of Arkansas. Thoma specializes in mathematical modeling and carbon Life Cycle Assessments (LCAs), and is lead author of the milk greenhouse gas (GHG) LCA.

For the executive summary of the study, [click here](#).