



Planet Impact Report

















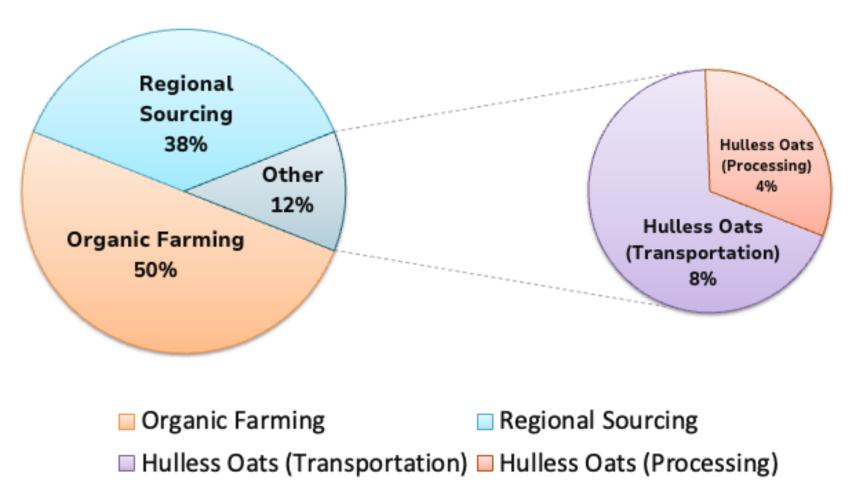
Planetary health is at the forefront of every decision we make at ZEGO.

This report highlights our focus and our results.

- Minimizing CO2 Emissions
- Water Conservation & Purity
- Regionally Sourced U.S.
 Ingredients
- Supporting Soil Health
- Organic Agriculture

CO2e Reduction

ZEGO Products vs Similar Conventional Products

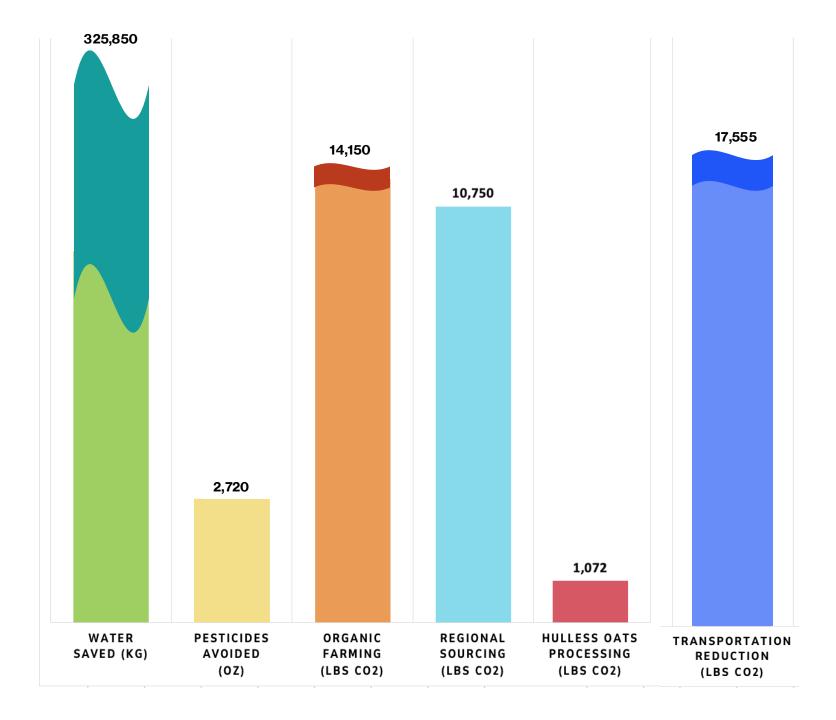


Source for hulless oats specific to ZEGO products. Other numbers are estimates based on available research, which can range significantly.

Summary IMPACT Metrics

Comparative
Reduction in
CO2e Emissions,
Transportation,
Pesticides &
Water Use*

^{*}Metrics compare ZEGO products to typical conventional versions of the same product. Numbers are best estimate based on resources cited. Waves indicate bar not to scale.



CO2e Emissions IMPACT

Drivers:

Hulless v Hulled Oats Cold Pressed Oatmeal Organic Farming Regional Sourcing

Transportation Reduction

38% reduction in CO2e due to hulless oats

Processing CO2e Emissions

 Hulless oats have zero CO2e emissions v hulled's 1072 lbs CO2e

Steam Usage Processing & Rolling

Hulless oats: Zero steam usage (metric TBD)

Organic Farming

• 6,626 to 21,500 kg of CO2e emissions avoided

Regional Ingredient Sourcing

 17,555 CO2e emissions avoided by reducing miles travelled for regional sourcing v long-haul shipping by 3100 miles/truckload

Hulless Oats

- "Hulless oats" have loose hulls that fall off into field during harvest
- Spent hulls build organic matter, increasing topsoil
- Spent hulls improve biome of soil
- Soil is regenerated for improved health of future harvests

Organic Farming

- Organic farmed soil sequesters more carbon than conventional farmed soil, and has
- Improved beneficial microbial activity
- Higher Ph levels (less acidification)
- Higher nutrient retention
- Higher water retention due to better soil structure

Soil Health IMPACT





Organic Farming Practices IMPACT

Compared to Conventional

Certified USDA Organic Ingredients

 Grown without synthetic pesticides, herbicides, or GMOs

Pesticide Use Avoided

- 2720 ounces of synthetic pesticides avoided
- Some pesticides are so toxic that consumption of one ounce can kill a human

CO2 Emissions Reduction

 6,626 to 21,500 kg of CO2e emissions avoided through pesticide reduction

Water IMPACT

Water Conservation

- 7.3 million gallons of water saved by using seeds instead of nuts like almonds
- 9900 gallons of water saved from farm to factory by using hulless oats compared to hulled oats
- Additional water saving in cold rolling process (metric TBD)
- Our hulless oats are dry farmed without irrigation, saving 325,850 gallons of water
- Reduction in Synthetic Pesticide Runoff into water sources
 - 150 to 250 pounds of synthetic pesticides avoided through organic farming (est. 2720 ounces based on 2023 USDA oats chemical use survey)



Regional Sourcing IMPACT

ZEGO's US & Regional Sourcing Priorities

- Reducing transportation emissions
- Supporting smaller US farms
- Supporting regional farmers

Ingredient Sourcing Statistics

- 80% sourced within 500 miles
- 13% sourced within 1,200 miles
- 7% sourced from overseas (seeds & spices)

CO2 Emissions

- Avoided 180 CO2e per tons/kilometer trucked and 14 CO2e per tons/kilometer shipped overseas
- 63%-86% reduction in CO2e emissions compared to longhaul domestic and international transport

Sources

Hulless v Hulled Oats

Modeling the Environmental Sustainability Naked vs. Hulled Oats, MIT Management Sloan School, 2018

Water

https://eos.com/blog/how-to-grow-oats/#:~:text=Growing%20oats%2C%20a%20water%2Dloving,is%20needed%20to%20grow%20oats.

https://www.almonds.com/sites/default/files/2024-07/Carbon_Footprint_of_Almonds.pdf

https://88acres.com/blogs/news/water-footprint-of-seeds-vs-

 $\underline{nuts\#:} \\ \text{":text=Nuts} \\ \text{"20Versus} \\ \text{"20on} \\ \text{"20on}$

Pesticides

 $\underline{https://www.nass.usda.gov/Surveys/Guide_to_NASS_Surveys/Chemical_Use/2023_Barley_Oats_Peanuts_Soybeans/ChemHighlights-Oats-2023.pdf$

https://www.wispolitics.com/wp-content/uploads/2024/05/Chemical-Use.pdf

https://extension.uga.edu/content/dam/extension/programs-and-services/integrated-pest-management/documents/handbooks/2020-pmh-

chapters/PesticideRate-Dosage.pdf

https://www.ars.usda.gov/ARSUserFiles/21904/Others%20PDFs/J%20Env%20Mgmt%20112p309.pdf

https://static.ewg.org/reports/2011/meateaters/pdf/methodology ewg meat eaters guide to health and climate 2011.pdf

Organic Farming

https://www.researchgate.net/publication/235407512 A meta-

analysis of the differences in environmental impacts between organic and conventional farming

https://www.organic-center.org/sites/default/files/publication_files/2020/03/Soil-Health-Review_ShadeTully.pdf

Transportation

https://8billiontrees.com/carbon-offsets-credits/carbon-ecological-footprint-calculators/truck-co2-emissions-per-km-calculator/

https://pubs.acs.org/doi/epdf/10.1021/es702969f?ref=article_openPDF

https://business.edf.org/insights/green-freight-math-how-to-calculate-emissions-for-a-truck-move/





We commit to environmental health with every ingredient we choose, every mile driven, every processing decision, and every packaging design.

