Project Outputs and Reporting

Participating growers will have the option to receive a casestudy environmental footprint of their farm on a per-acre and per-crop basis, with individual practices highlighted for benefits and impact tradeoffs, compared against an aggregate baseline.

Privacy and Data Protection

No identifying information or specific location is ever shared or published without express permission! Grower privacy and data protection is extremely important for trust and productive partnership with growers and other industry stakeholders. Only regional aggregate results are published and presented.

LCA Information Page/Survey Link



Contact Us

Elias Marvinney – Project Scientist

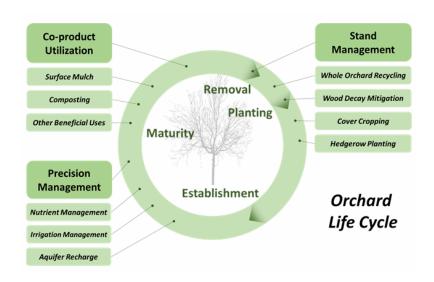
Phone: 617.721.9636

Email: emarvinney@ucdavis.edu

Web: https://sarep.ucdavis.edu/are/energy/lca

Life Cycle Analysis (LCA) of Perennial Crops

ORGANIC PRACTICE ASSESSMENT



University of California - Organic Agriculture Institute Dept. Civil and Environmental Engineering, UC Davis



What is LCA?

Most retail food products result from long and complex production and supply chains with variable impacts on environmental health and natural resources.

A life cycle assessment (LCA) is a tool for analyzing the environmental impacts and resources used throughout a product's life, from raw materials extraction to production, and extending through product use and disposal.



LCA can be used to compare alternative products, processes or services; compare alternative life cycles for a certain product or service; or identify the parts of a life cycle where the greatest improvements can be made.

LCA quantifies environmental **benefits** as well as impacts.

Assessing the Benefits of Specific Organic Practices to Support Growers.

Biodiversity, soil health, carbon storage – all familiar terms to the organic grower. We seek to quantify benefits like these as well as any impact tradeoffs, to provide growers – certified organic or otherwise – with high quality information for marketing, management decisions, and access to programs supporting regenerative agriculture practices.

On-farm data collection

Fuel and Energy



- Diesel and gasoline
- Grid or renewable energy
- Hours per management task
- Equipment and attachments
- Make, model, horsepower

Chemical and Materials



- Fertilizer, nutrients
- Soil amendments
- Pest, weed, disease control
- Stakes, tree paint, etc.
- Irrigation water, system

Biomass and Soils



- Manure
- Compost, green waste
- Woodchips
- Cover crops
- Animal integration