

# Carbon Footprint of the NSW Oyster Industry

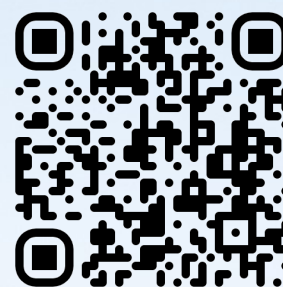
The NSW oyster industry operates with a very low carbon footprint, making it one of the lowest carbon food proteins produced.



## Background:

Carbon neutrality continues to gain momentum in seafood markets and investment circles. While oyster farming has long been considered a low greenhouse gas footprint food, until now, no comprehensive carbon audit had been conducted at the sector-wide level.

A project led by NSW Farmers Association enabled thirty-one NSW oyster farms to undertake carbon audits. Detailed emissions data was then consolidated and extrapolated to estimate statewide emissions. This provided the foundation for a comprehensive industry-wide assessment.

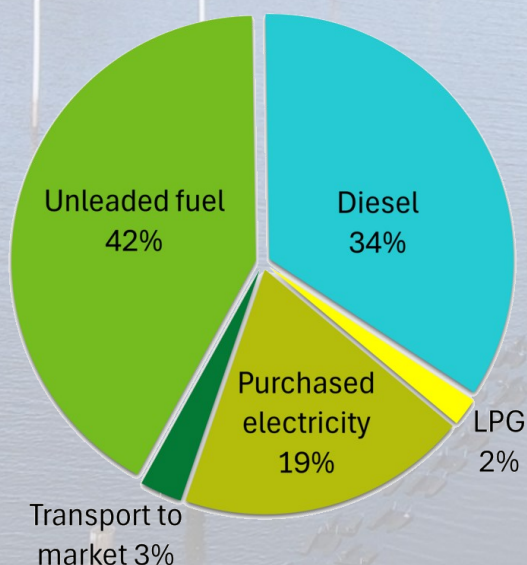


[Link to report](#)

## The Carbon Story based on 2022-23 production data

Total Industry Emissions	2,640 tonnes CO <sub>2</sub> e
Carbon Intensity	0.93 kg CO <sub>2</sub> e / kg
	3.75 kg CO <sub>2</sub> e / 100g protein

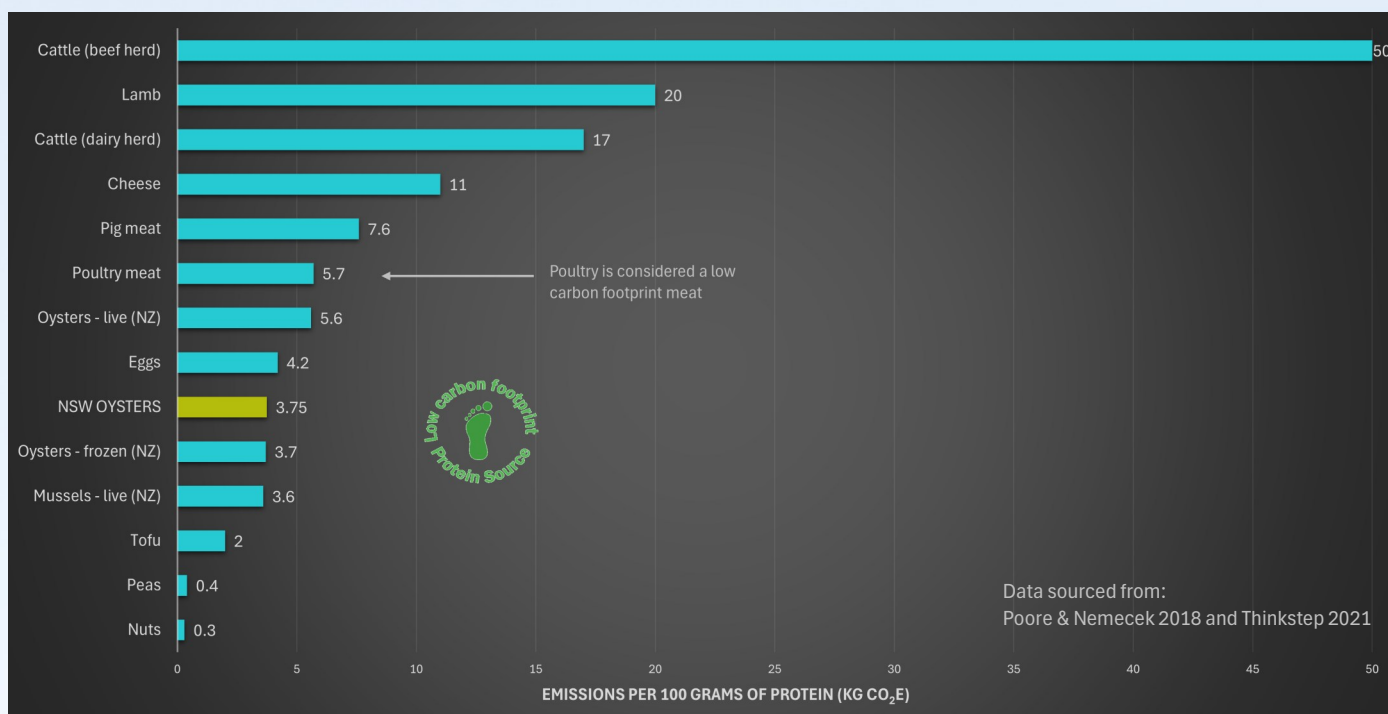
### Source of Emissions:



### Offset Cost:

If emissions were offset using Australian Carbon Credit Units at \$34 per tonne CO<sub>2</sub>e, statewide annual emissions from the NSW oyster industry of 2,640 t CO<sub>2</sub>e could be offset for ~\$100,000, or approximately 1.5 cents per dozen oysters sold.

## Comparison to Other Proteins:



Oysters perform very well when compared to other sources of protein. Poultry is generally considered a low-emission protein source, so foods with even lower emissions are likewise viewed as having a minimal carbon footprint.

### Report Recommendations: (see full report for detailed list)

- **Adoption of solar systems:** Farmers should leverage government subsidies for solar systems and battery storage to reduce emissions and improve energy resilience.
- **Outboard trials:** Pilot projects to evaluate the viability of electric outboards, testing their efficiency, range, and practicality for use in oyster farming.
- **Life-cycle assessments:** Research is required to accurately understand carbon flows within the context of oyster farming, including shell biomineralisation and dissolution.
- **Climate Active certification:** Given the industry's low emissions, farmers could explore third-party certification, while engaging with Climate Active to investigate the feasibility of sector-wide certification.