



PLANET GREENHOUSE GAS EMISSIONS

| acting on climate change

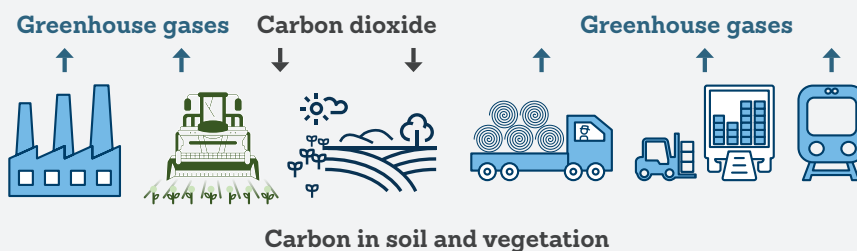


Source: Visser, Carbon Footprint of Australian Irrigated Cotton 2019. CRDC research.

Cotton production releases greenhouse gas emissions.

Growing, ginning and transporting cotton to port is estimated to account for about 0.2 per cent of Australia's greenhouse gas emissions (GHGs).

Nitrogen (N) is essential for plant growth, but N fertiliser also accounts for about 70 per cent of on-farm cotton GHGs. Reducing the amount of N used to grow a kg of cotton is therefore essential to reduce GHGs.



Cotton farms store carbon.

Vegetation on cotton farms naturally removes (sequesters) carbon dioxide from the atmosphere. CO₂ can be stored as carbon in vegetation, and in soil.

The cotton industry is working with others to accurately calculate carbon sequestration on cotton farms, and the farm practices that have the biggest impact on sequestration.

$$\begin{array}{c} \text{Less} \\ \text{greenhouse} \\ \text{emissions} \end{array} + \begin{array}{c} \text{More carbon} \\ \text{storage} \end{array} = \begin{array}{c} \text{Reduced net} \\ \text{greenhouse} \\ \text{emissions} \end{array}$$

The cotton industry aims to reduce greenhouse emissions and increase carbon storage.

Reducing net greenhouse gas emissions makes a positive contribution to climate change and can also benefit cotton growers. For example, using less fuel and fertiliser can save money. Plus carbon-rich soil organic matter and native vegetation can support more fertile soil and habitat for beneficial insects that can help control cotton pests.

OUR AMBITION

To contribute to the Paris Agreement's aim of a climate neutral world. This would mean reducing the emissions released in cotton production while sustaining carbon in the soil and vegetation on cotton farms.

SDG ALIGNMENT



SDG 13: Take urgent action to combat climate change and its impacts.

UNFCCC Paris Agreement: limit global warming to 1.5C.

PATHWAY

1. Improve nitrogen use efficiency.
2. Increase adoption of enhanced fertilisers.
3. Reduce energy emissions from fuel and electricity use.
4. Increase carbon sequestration and storage on farms.

KEY FACTS

0.2% of Australia's greenhouse gas emissions come from growing, ginning and transporting cotton to port



Relatively flat trend in emissions per bale from 2016 to 2022: more can be done to reduce emissions.