Energy is one of the fastest growing on-farm costs for cotton-growers. Research invested in by the Cotton Research and Development Corporation (CRDC) benchmarked the cost of on-farm energy consumption, and the productivity and profitability gains of alternative sources.

ISSUE
A 2015 research project commissioned by CRDC found that the average direct energy cost for irrigated cotton growers was $298 per hectare, with diesel fuel accounting for at least 85 per cent.

SOLUTION
To combat these rising costs, the cotton industry has been investigating alternative energy sources. The cotton industry’s extension program, CottonInfo, has undertaken feasibility studies with irrigators to determine economic costings and carbon emission profiling of alternative options, with support from CRDC and the Australian Government’s Carbon Farming Futures Extension and Outreach program.

RESULTS
These feasibility studies demonstrate that alternative energy sources can result in substantial cuts in fuel costs, greater irrigation efficiencies and a large reduction in greenhouse gas emissions.

For cotton grower Andrew Gill of Narromine, for example, the installation of a solar-diesel hybrid irrigation bore pump on his Central West NSW farm has cut pumping costs from $76/ML to $41/ML, and slashed diesel use by between 45,000 and 55,000 litres a year. Over 25 years, that equates to a saving of more than one million litres of fuel and a reduction of over 3,000 tonnes in carbon emissions — delivering both economic and environmental rewards.

“Improving energy efficiency on cotton farms is a win-win: it benefits both the growers’ bottom line and our industry’s environmental footprint.”
CRDC Executive Director, Bruce Finney

Alternative energy: the economic and environmental rewards
FARMGATE RETURNS

Smarter farming drives improved productivity and profitability, on and off-farm

Image credit: Andrew Gill