CottonInfo: Connecting growers with research View this email in your browser

Energy audits spark on-farm savings

Energy is one of the fastest growing on-farm costs (electricity costs alone have increased by around 350 percent since 2000). To help growers cut costs and improve their on-farm energy efficiency, CRDC, NCEA and CottonInfo have been delivering the ***Improving energy efficiency on irrigated cotton farms*** project over the past two years, including delivering on-farm energy-audits to growers.

Today, we're releasing a **benchmarking report of direct energy consumption** (diesel and electricity use) on our cotton farms, based on the findings of 198 whole-farm energy assessments.

Five key findings from the report:

1. Cotton farms use an average of **11.2 GJ per hectare** in fully irrigated cotton production.
2. Generally, **half of the direct energy consumed is through irrigation**, and about 25 percent is through high load tractor operations pre-season and post-harvest. Significant tractor energy savings of up to 20 percent are possible through tractor/implement setup.
3. Diesel provides at least **90 percent** of the direct energy used on farm.
4. Expenditure on diesel is at least **85 percent** of total energy expenditure.
5. The average direct energy cost (across the 198 farm results) is **$298 per hectare**. This represents 8.5 percent of the average per hectare cost of production (reported in 2013 as $3627 per hectare).

So, what can you do on-farm to reduce energy consumption?

The report recommends:

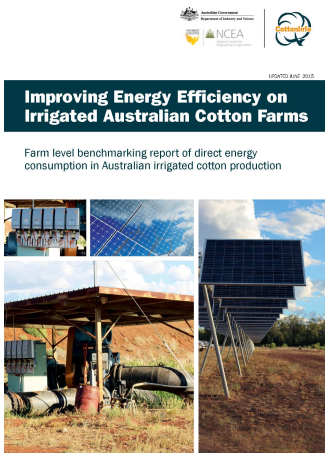
- **Ensuring that any water extracted from a water source is not lost to seepage and evaporation** in storage, delivery and in-field (smaller quantities of water pumped mean smaller energy bills).
- **Reducing the amount of trash that makes it to the intake of a pump.** Very small amounts of trash can have a large impact on the performance of a pump (up to 30 percent reduction in head and discharge).
- **Ensuring tractors have the correct and appropriate ballasting, tyre pressures and implement depth control.** This can help achieve a 20 percent fuel saving.
- **Measuring high energy use elements** via fuel and water flowrate indicators, pressure gauges, tachometers and hour meters.

Where can you go for more?

For the full results, download the *Benchmarking report of direct energy consumption in Australian irrigated cotton production*, or the quick-reference *Grower Summary*.

For more information on energy use efficiency, visit the CottonInfo website.

To monitor your on-farm energy use, check out the EnergyCalc Lite app.



The Improving energy efficiency on irrigated cotton farms project (managed by CRDC and implemented by NCEA with support from CottonInfo) received funding from the Commonwealth Department of Industry and Science under the Energy Efficiency Information Grants scheme.

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