

Common “Energy Hogs” of a Poultry House

Energy costs are usually the largest single out-of-pocket expense for poultry growers. Unfortunately, electricity prices continue to increase. Using electricity more efficiently while maintaining flock performance is one alternative a grower has to decrease energy costs. Maintaining and managing existing equipment can reduce electricity usage with little input costs.

Did you know...?

- That one dirty tunnel fan can decrease fan efficiency, and can cost about \$35.00/fan/year. A poultry house with ten dirty tunnel fans can cost \$350/year. Not only are dirty fans moving less air through the house, they also increase energy consumption.



- Dirty fans and shutters have a negative impact on flock performance. A study by researchers at Mississippi State (Simmons et al., 2003) reported that a 30% reduction in tunnel air velocity had a negative impact on bird performance. Body weight gain of birds decreased by 5%, and feed conversion was 5.5% higher in birds exposed to lower air velocity.
- Leaving fans on after a flock has moved can also cost you money. If four tunnel fans are left on in an empty house for eight hours, it will cost about \$4.40/house. Four sidewall fans left on for eight hours after flock movement will cost about \$1.90/house.
- Not turning lights off in a house after a flock has moved wastes electricity and

causes unnecessary expenses. If lights are left on in a 500-foot poultry house with 56 bulbs (60W) for eight hours it will cost about \$3.20/house.

- If a feed line is allowed to run empty for four hours six times a flock, it will cost approximately \$0.86/flock. Empty feed lines not only waste electricity, but may have a negative impact on flock performance, and can decrease the life of equipment.
- If all of these energy misdeeds (excluding sidewall fans) occur during one flock on a four-house farm, it will add up to about \$36.00/flock in electricity costs.

These “energy hogs” require energy and cost input without providing any production output!



Energy usage information provided and reviewed by Gary Van Wicklen, Ph.D., Poultry Engineer, Extension Specialist, University of Delaware

Reference

Simmons, J.D., B.D. Lott, and D.M. Miles. 2003. The effects of high-air velocity on broiler performance. *Poult. Sci.* 82:232-234.

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