



Santrev - Sustainable Farming

Developing energy efficient poultry farming has been a central core value to Santrev for the past 40 years of building poultry sheds in Australia. The Santrev Sustainable Farming Model is as much about optimising the bird's growing environment as it is about minimising energy consumption.

“Yes, sustainability is an area we are very passionate about” said Luke Trevanion, Director and General Manager of Santrev. “One of the benefits of our leading position in the industry is that we travel throughout Australia and the world. We are able to keep abreast of energy efficient developments and bring them home to our customers.”

There are a range of new technologies and developments Santrev are currently pursuing. Take a typical poultry farm- most energy consumed is due to heating (usually gas), ventilation (usually electricity), and of course lighting. New technologies offer the opportunity to reduce this consumption. For example, LED lighting can significantly diminish the amount of electricity utilized.

Solar and wind generated electricity will also make their impact. It seems logical when you see that abundance of roof that it should be fitted with solar panels. The majority of electricity consumed in a poultry house is during the day when the sun is at its brightest so solar should work very well with poultry farming. Mr Trevanion went on to say “we are buying a broiler farm so we will trial a range of these developments. We are keen to see what cost efficiencies we can achieve.”

It remains that heating and ventilation are central to providing the growing environment. However, these two are constraints imposed upon the farm manager by the physical characteristics of the shed. How well insulated is it? How many air leaks are there? How well is air mixing before it hits the birds? Most of these factors are outside of the managers' control but collectively, they have a major impact on the managers' ability to hit productivity targets.

“We believe that shedding pre-determines the possible productivity and energy efficiency of the farm,” says Mr Trevanion. “Productivity and energy efficiency go hand in hand. If the shedding is sub-standard, then more energy is required to control the environment leading to increased costs. Even with more dollars spent on attempting to control the environment, the variation in temperature/humidity, the uniformity of these is nowhere near as consistent as in a good shed. In recent thermal photography trials we found the Santrev shed floor to fluctuate less than 0.1°C whereas a shed with exposed purlins and trusses showed floor temperature fluctuations of 1.2°C. The result is that growing performance is downgraded.” No matter how good the management is, a poor shed lowers the possible productivity and increases energy consumption. This in turn reduces profitability and return on investment.

Santrev uses thermal imagery, monitors gas and electricity usage, and of course bird productivity when benchmarking their sheds. “One of the benefits of modern composite materials is that we can now use building materials that are both structural and highly insulative”, Luke said. “We

have spent a great deal of time and money in developing the most efficient poultry sheds that create a uniform and readily controllable growing environment.”

Working with key processors and respected poultry veterinarians such as Dr. Steve McGoldrick has helped Santrev test and refine their shed so that the Santrev shed can offer the optimum, controlled growing environment for the birds. A host of features in the shed combine to create this environment. A direct outcome of a shed is greater efficiency, which means less energy usage. The Santrev shed performs better, offers a sustainable farming system and the possibility of better profitability and return.

