

CLEAN, RELIABLE ENERGY FOR POULTRY OPERATIONS



Poultry farm owners and operators face volatile energy prices, increasing risks of weather-related grid outages, and growing consumer preference for sustainable practices. It's time to consider a cost-effective solution: a PV solar plus storage system.

Imagine slashing electricity bills by up to 91% while ensuring an uninterrupted power supply to protect your flock from losses during grid outages. A solar photovoltaic (PV) system combined with a battery

energy storage system (BESS) can make this a reality for your farm.

Now is the ideal time to transition to clean, reliable energy for your poultry operation because the financial barriers have never been lower. Federal incentives like the Investment Tax Credit (ITC) cover 30% of system costs (with a 10% adder for historically low-income communities), and the U.S. Department of Agriculture's (USDA) REAP Grants offers up to 50%.

What would this look like for your poultry operations?

The 91% utility bill reduction at the average cost of electricity in Arkansas translates to a potential annual savings of more than \$37,000¹, a considerable stabilization of your energy costs against future price hikes. Maybe you've already done some back-of-the-envelope calculations and concluded you would need a substantial initial investment for a solar PV and battery storage system with a nearly 23-year payback period based on annual savings.

However, leveraging the maximum federal incentives would significantly reduce your initial investment. With potential savings of more than \$37,000, the payback period shortens to 8.6 Years (before O&M costs). After that, you'll enjoy decades of lower energy costs since systems can last more than 30 years.

Energy security is paramount in poultry farming. A power outage can lead to devastating consequences within minutes. Solar panels, designed to withstand

extreme weather conditions, continue generating electricity even when the primary grid is down. The battery storage system ensures your farm maintains power for cooling, ventilation, and lighting, safeguarding your birds' health and your farm's productivity.

Investing in solar plus storage means you're not just cutting costs, you're future-proofing your farm. As energy demands grow and extreme weather events become more frequent, your operation will remain resilient and efficient. Plus, you'll be aligning with sustainability goals, enhancing your farm's public image, and potentially opening doors to environmentally conscious markets.

Embrace the future of poultry farming with solar plus storage - where cost savings meet energy security, and sustainability becomes a cornerstone of your operation's success.

¹Assuming an electric rate of 11 cents per kilowatt-hour (kWh), the current average rate in most of Arkansas.

As energy costs continue to rise, poultry farms face increasing challenges in managing operational expenses. A solar plus storage system provides cost savings, energy security, and environmental benefits.

Key Benefits of a solar PV system with battery energy storage system (BESS) for poultry operations:

Substantial Cost Savings

- Reduce electricity bills by up to 91%
- Stabilize energy costs against future price hikes
- Optimized site economics via access to ancillary energy markets, peak shaving, demand response programs, and more

Strengthen Energy Resilience

- Uninterrupted power supply during grid outages
- Protection against catastrophic bird losses due to power failures
- Maintain optimal conditions for poultry health and productivity

Environmental Stewardship

- Significantly reduce your carbon footprint
- Align with sustainability goals and regulations
- Enhance your farm's public image



Benefits and Returns

- Entire system (PV + BESS)
- Payback period: 8.6 years with maximum federal incentives
- Long-term benefits: 30+ years of reduced energy costs



Financial Incentives

- Federal Investment Tax Credit: Up to 30% of system cost
- REAP Grants: Up to 50% of system cost
- Additional state and local incentives may be available



Additional System Details

- Ground-mounted solar panels between poultry houses
- Designed to withstand extreme weather conditions



Trinasolar (U.S.) Inc.
7100 Stevenson Blvd., Fremont, CA 94538

www.trinasolar.com/us/trinapro-solution

Interested in learning more
about cost-effective solar
solutions for agricultural operations?

Download our comprehensive white paper by scanning the code below.

