



# How Drone Technology Mitigates Solar Utility Industry Pain Points

## Executive Summary

The solar industry is a burgeoning giant in the renewable energy sector. However, ensuring the safety, efficiency, and longevity of solar installations presents several logistical and technical challenges. Traditional inspection methods, often reliant on manual labor and risky procedures, struggle to keep pace with the industry's rapid growth. This white paper explores how drone technology offered by companies like Birds Eye Aerial Drones serves as a game-changer, mitigating eight key pain points plaguing the solar utility industry.

## Challenges And How Drones Take Flight

### 1. Safety Concerns:

Climbing rooftops and navigating large solar farms poses significant safety risks for inspection personnel. Birds Eye Aerial Drones eliminates this hazard entirely. Our FAA-certified pilots utilize state-of-the-art drones, conducting thorough inspections remotely, keeping workers safe on the ground.

### 2. Case Study: Birds Eye in Action

Project Name: Community Solar Rooftop Installations (20 Sites) Challenge: Standardize inspection procedures and ensure consistent data collection across multiple rooftops. Solution: Birds Eye developed a standardized inspection protocol utilizing drones. The captured data provided a detailed and objective assessment of each rooftop solar system, allowing for efficient maintenance planning.

### 3. Hidden Issues and Preventative Maintenance:

Early detection of potential problems like micro-cracks or malfunctioning components is crucial for optimal solar panel performance. Birds Eye's thermal imaging capabilities identify these issues before they become major problems, preventing costly repairs and downtime.

### 4. High Labor Costs:

Finding and retaining qualified inspection personnel can be expensive. Birds Eye Aerial Drones offers a cost-effective alternative. By streamlining the inspection process with drones, the need for a large workforce is reduced, freeing up budgets for other areas.

### 5. Post-Installation Monitoring:

Regularly monitoring solar panel health and performance is essential but resource-intensive. Birds Eye provides a convenient solution. Scheduled drone inspections offer a quick and efficient way to track performance and identify potential issues early on.

### 6. Data Analysis and Reporting:

Manually managing and analyzing large amounts of inspection data can be overwhelming. Birds Eye provides user-friendly reports that translate captured drone data into actionable insights, simplifying decision-making for solar utility companies.

### 7. Insurance and Permitting Requirements:

Regulations and insurance requirements can complicate solar inspections. Birds Eye's FAA-certified pilots and in-depth knowledge of industry regulations ensure compliance with all permitting and insurance needs, streamlining the process for our clients.

## Conclusion:

### A Brighter Future with Drone Technology

The solar industry's future is undeniably bright. By embracing innovative solutions like drone technology offered by Birds Eye Aerial Drones, solar utility companies can overcome critical pain points. Drones ensure safety, expedite inspections, improve data accuracy, enable preventative maintenance, and simplify regulatory compliance. By partnering with Birds Eye, companies can focus on their core mission – delivering clean, sustainable energy for a brighter future.

**We at Birds Eye Aerial Drones are committed to being your partner in achieving solar excellence. Contact us today to learn more about how our drone services can elevate your solar projects!**