RuAnn Dairy in Riverdale, CA



avus 500plus

Biogas

Fast Facts:

Location: Riverdale, CA

Generating Capacity: 550 kW

Configuration: Basic Container



About the Site:

In the heart of California's San Joaquin Valley, you'll find RuAnn and Maddox Dairy Farms, a family-owned and operated establishment. Beyond their dairy operations, the family manages a sprawling 10,000-acre estate, consisting of 5,000 acres dedicated to vineyards and almonds, and an additional 4,000 acres dedicated to supplying feed for their dairy operations. Renowned for its pedigree of Holsteins, the RuAnn facility also boasts a cutting-edge in vitro fertilization facility focused on genetic advancements.

The avus 500plus system, with a power output of 550 kW, is an exceptionally efficient engine that runs on biogas to generate both electricity and thermal energy. The customer harnesses this heat directly to warm the digestor, creating biogas, which, in turn, powers the engine. The electricity generated in this eco-friendly process is fed back into the grid for local utility consumption. A unique factor of the project is that it is integrated with a solar field nearby to create a full-scale microgrid with the CHP as the backbone. By producing green energy, the customer qualifies for both state and federal tax incentives, allowing them to maintain substantially lower total operating costs.

2G provided a containerized solution with SCR, and biogas treatment system.