Opportunities and Risks of Carbon Markets for Dairies

Boise & Burley
March 27th – 28th, 2024

University of Idaho Extension
ANAEROBIC DIGESTION – QUICK REVIEW

✓ Natural process, using bacteria already in manure

✓ Convert some manure solids/carbon into biogas and collect for beneficial use

✓ Use biogas to make (1) renewable electricity or (2) pipeline renewable natural gas (RNG)

✓ Improves: (1) odor; (2) pathogens; (3) partially stabilizes the waste; and (4) fiber product for bedding

✓ Won’t (1) reduce wastewater volume; (2) nutrient loading – Note – higher ratio ammonia-N/organic-N
WHY INTEREST IN INLAND EMPIRE/IDAHO

✓ US, regulators, milk product marketers, corporations are becoming more and more interested in environmental footprint, including climate change.

✓ Anaerobic digesters and/or alternative manure management techniques can help reduce methane emissions on dairies.

✓ Anaerobic digesters hold potential for doing this while turning a profit and providing some return to dairies.

✓ Federal and state governments all working on providing grants, programs, credits, etc. to make this a viable solution.
Key Facts to Know

- Digesters are expensive to construct and operate as well as complex accounting for credits, grants, etc.

- As such, many projects now developed by 3rd party financiers to cover and manage costs/complexity
  - We are seeing some dairies buck this trend and develop/monetize the project themselves

- Such projects require lease agreements, manure handling agreements, 10+ year future commitments in those agreements, and team-work to be successful

- Degree of profit sharing, payback timing, concerns with fluctuating market pricing, underwriting, who takes the financial burden, etc. are all points of negotiation.
Conclusion

✓ Some negative trends are presently occurring in the digester space – Depressed LCFS pricing due to oversupply; more difficult LCFS rules impinging on projects; increasing equipment costs; no passing of federal eRINs.

✓ These concerns are only exacerbated for smaller projects like in Boise Area, due to economies of scale.

✓ The outlook for Idaho digesters, either electricity or RNG, are presently difficult, but in this industry pricing/regulation changes almost quarterly – requiring checking in regularly.

✓ Programs like federal ITC and REAP have grants/credit programs and other incentives to try to push these projects to greater economic viability.

✓ **Lesson – Continue to watch, listen, ask questions, and consider.**