



Outagamie Clean Energy Partners

Partners in Agriculture

Considerations for Choosing the Right Partner for your RNG Project

Today's farmers deal with multiple existing complexities on a daily basis. When considering adding another in the form of an RNG/Anaerobic Digester project, it is difficult to know where to start. When hundreds of thousands or even millions of dollars of revenue per month are on the line, delays or working with the wrong partner can be frustrating and a significant loss of revenue. Each component of the project must be carefully planned and coordinated to deliver a successful project. Below are several key components that OCEP will assist in to ensure the successful execution of a biogas to RNG project.

Identify Opportunity & Feasibility: OCEP developers are very good at understanding if an opportunity is a good one. But for those developing a first or second project, the variations in credit prices and changes in the quickly morphing RNG industry can sidetrack it. Putting together solid preliminary numbers is important — but so is executing to achieve them. Distance to the injection point and overall logistics can make or break the success of a project. OCEP deploys the resources and time at the front end that is needed to ensure the project will be a success.

Financing: The recent banking credit crunch has made funding any project more difficult. OCEP assists with the capital requirements needed for large- and small-scale projects. We have seen project developers spend years in fundraising mode even for a project that is very lucrative on paper. Working with a partner that has funded and are funding RNG projects can greatly reduce the time to close which means getting to revenue sooner.

Feedstock Assessment: Farming does have industry standards that can allow for developers to make projections in generalities, but at OCEP we take the time to evaluate current practices and proper manure analysis to ensure accuracy in revenue projections. Typically, developers seek only the largest farms to develop a project. At OCEP part of our mission is to develop smaller projects to allow small and mid-size dairies to participate in the revenue of RNG and become more sustainable in the long term. This approach allows multiple farms in any given region to cost share infrastructure to allow for profitability.

Identify Pipeline Access: Assuming that USEPA will approve a new interconnection, setup is common but may not be realistic. If a project has a unique component that has not been approved by USEPA in the past, expect delays during the registration process. OCEP engages with USEPA early in the planning and design process is recommended to avoid these delays or worse, having to install additional equipment after the project is fully constructed. Furthermore, the assumption that the nearby commercial pipeline will work with the project in a timely manner may also cause problems. Contacting and having an established relationship with the pipeline owners is crucial.

Industry Alliances: Identifying, hiring, and working with the right team may be the most important decision a farmer makes. New players are entering the marketplace on a near daily basis. Working with an experienced team like OCEP will help deliver a project on schedule and on budget. OCEP has formed industry alliances to offer a turnkey solution. Considerations when assembling the team include:

- **Offtake Partner & Financial Structure:** Most RNG projects cannot work without monetization of the environmental attributes of the RNG. Finding the right offtake partner, whether for transportation fuel or into the voluntary markets, is critical.
- **Technology Assessment & Biogas Upgrading Equipment Selection:** Working with experienced equipment vendors with proven technology is part of OCEP's commitment to align with proven industry leaders to ensure the smooth execution of the project. OCEP provides references, installation lists, and tours with other project owners using the technology. With all the excitement and development in the biogas to RNG space, new vendors with new equipment are seemingly coming out every week. When millions of dollars of revenue are at stake, proper due diligence and selecting equipment that will consistently meet the pipeline specifications with minimal downtime is very important.
- **Renewable Energy Consultant:** OCEP has partnered with the best and most experienced renewable energy consultants to navigate the complex environment of RNG. OCEP will guide you through the complex regulatory environment, help maximize RNG value, and identify potential roadblocks or gaps within your project.
- **Design Engineer & Contractor Selection:** Digesters and upgrading equipment are specialized equipment. Piping material selection, heat tracing or insulation of some lines, moisture capture, appropriate controls and monitoring, and many, many, more decisions like these are crucial to the long-term success of your project. Design issues that cause your system to be down for an extra few days per year can be expensive. OCEP has experienced environmental engineers to avoid many of the traps that often occur in developing and executing RNG projects.

Post Digester Nutrient Management: A frequent fail point with anaerobic digestion projects has been what to do with the digestate. It is important to understand the management options, plan of action, and associated costs. Farmers are often sold that markets will develop for the liquid nutrient-rich stream and the dewatered solids, where both streams will end up as additional revenue sources. When this doesn't materialize, digestate handling can be a cost center as opposed to a revenue generator. OCEP will consult with the available technologies and continue to seek out alternative nutrient concentration technology. If a company can does not provide a performance guarantee OCEP will not consider them to be part of a project.

Permitting: Local permitting requirements — city, county, state, air quality, and other land use authorities — are complex and almost always vary state to state. Knowing when to submit these permits and the review time required by the various agencies can alleviate frustrations with the project schedule.

Operations and Staffing: All too often, the phrase “these things basically operate themselves,” has been pitched. Things will break, pumps will fail, and feedstock and digestate handling will be more labor intensive than expected, all at inopportune times. An experienced operator will know how to respond, manage the situation, make the necessary repairs and will be worth every penny of cost.

Compliance: Once OCEP successfully navigates all these areas (and many more) and the project is operational and generating revenue, the work does not stop. Because the OCEP model is a true partnership, assistance with compliance requirements to ensure validation and verification of the environmental attributes will continue. This compliance work may be as little as sending pipeline injection volumes to a voluntary offtake party or may be much more complex with RIN and LCFS credit auditing and validation.

A common theme is evident in this complex process. Working with the right project team and project partners through all phases — from conception to completion and operation — will lead towards more successful projects.