anessa BIOGAS SOFTWARE

Use Case – AD•A No.05

DUE DILIGENCE AND PROJECT VALIDATION WITH LEYLINE CAPITAL

Dairy Manure RNG Project in California, USA

AT A GLANCE

Leyline Renewable Capital had keen interest to evaluate a dairy manure RNG project based in California. The firm received information in an unfamiliar format with different data sources and assumptions.

Prevented an overestimation of

80,000,000 ft³

of biogas per year

At 47,000 MMBtu per year, avoided an overestimation of

3,000,000 USD

in annual revenue

"Being able to do Sensitivity Analysis, analyze Greenhouse Gas emissions, and other features we weren't previously considering, such as digester sizing, and volume of effluent coming from the digester we have been very grateful for."

ALLAN ODUOR
Development Analyst @
Leyline Renewable Capital

BACKGROUND

Leyline Renewable Capital provides flexible capital solutions to further sustainable industries. As former developers, the Leyline Renewable Capital team knows the challenges in the project development cycle and has the expertise and capital to help.

Leyline has invested in more than 40 projects that are generating a substantial positive impact on our environment and economy.

CHALLENGE FACED

Leyline Renewable Capital was considering investing in a California-based opportunity, but wanted to gain a full scope of the project's bottom line beforehand. Differing information was provided by both the EPC and the main developer. Values were provided in a format with units that were unfamiliar to the Leyline team. Leyline was looking for a solution that could help them account for these different variables and could provide them with a benchmark range for future calculations.

WHY ANESSA?

Leyline Renewable Capital sought out anessa to review and validate the information provided. Using anessa AD•A, the team was able to assess the parameters involved, identify discrepancies that required immediate attention, seamlessly convert information into familiar units, and access the anessa feedstock database as a reference to benchmark external assumptions.

THE RESULTS

A risk assessment analysis report generated by AD•A helped pinpoint the discrepancy that could lead to a 10% deviation between the two sources. anessa AD•A was able to prevent an overestimation of 80,000,000 ft³ of biogas per year. At nearly 47,000 MMBtu per year, this discrepancy equates to an overestimation of 3,000,000 USD in annual total revenue.
When presented with this use case, our solution enabled Leyline to understand unfamiliar values by converting lb/hr of CH4 and CO2 to their percentage in the biogas produced. By using the anessa feedstock database, the Leyline team was able to benchmark the volatile solids, total solids, and biomethane potential values provided by differing data streams.

KEY FUNCTIONALITY

anessa AD•A's extensive feedstock database is an available resource for anessa users. With access to over 200 organic feedstock, clients can benchmark assumptions for different data sources or use feedstock values within the preliminary analysis to gain insight on the viability of new opportunities that have not undergone feedstock testing.