Maximo Asset Management in the RNG inclustry

Optimizing Asset Lifecycles and Ensuring Compliance

Introduction

- Overview of the RNG industry which converts organic waste into biogas
- Importance of asset management to protect the environment & safety
- Pioneering the integration of Maximo to leverage superior asset management, thereby driving sustainability, operational efficiency, and compliance.

What is RNG?

- Renewable Natural Gas (RNG): Methane is produced from organic waste materials such as agricultural waste, landfills, and wastewater. It serves as a cleaner alternative to fossil natural gas.
- Market Dynamics: Growing demand for sustainable energy solutions has positioned RNG as a crucial component in achieving emission reduction goals.
- **Key Processes**: Primary stages in RNG production, are anaerobic digestion and gas purification.





Importance of Asset Management

- **Operational Efficiency**: Effective asset management ensures that all equipment and processes are optimized for maximum efficiency, which is vital in a resource-intensive industry like RNG.
- **Cost Savings**: Well-managed assets have longer lifespans and lower operational costs, contributing to the overall profitability of the enterprise.
- **Regulatory Compliance**: Asset management systems can help in meeting industry-specific compliance requirements, a critical concern in the RNG sector.

SCADA integration

- SCADA in RNG: SCADA (Supervisory Control and Data Acquisition) systems are crucial in the renewable natural gas industry for real-time monitoring and control of various processes such as biogas production and upgrading.
- API's are used to link Maximo with a SCADA system. This would allow real-time status updates from SCADA sensors to populate within Maximo's asset management interface. For example, if at 3:00 AM a compressor in a biogas plant is overheating, that data could be sent from the SCADA system to Maximo via the API. Maximo could then automatically generate a work order for preventive maintenance based on this data. As well as alert on call operators.
- Maximo Mobile provides field techs with the ability to scan the asset, identify the problem area and access repair history or maintenance manuals and guidelines. It significantly enhances the efficiency of field techs by providing real-time data and immediate actionable insights.





Compliance & Regulations

Importance of Compliance in RNG: Compliance with environmental and safety regulations is pivotal in the RNG industry. This includes meeting emissions standards, proper waste disposal, and safety protocols to prevent accidents.

Types of Regulations:	 Federal and State Emissions Standards: RNG facilities must adhere to stringent emissions controls. Waste Management: The treatment of organic waste during biogas production must meet specific guidelines. Safety Regulations: Includes safety protocols for handling combustible gases and pressurized equipment.
Challenges in Compliance:	 Complexity of keeping up with frequently changing regulations. The necessity of meticulous record-keeping for audits.
Maximo's Role in Compliance:	 Automated Reporting: Maximo can generate required emissions and waste disposal reports that are compliant with federal and state laws. Documentation Storage: All compliance-related documents can be securely stored and easily retrieved in Maximo. Compliance Tracking: Maximo can be configured to provide alerts when compliance thresholds are nearing or have been breached.

Maximo aids in compliance by automating the reporting process, securely storing all relevant documentation, and providing real-time tracking and alerts for compliance metrics. For example, if emissions approach a certain limit, Maximo can automatically flag this and notify the relevant personnel to take corrective action.

About the presenter:

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Bio:

With a background in Data Analysis and a focus on the Renewable Natural Gas sector, Krystal brings over 10 years of experience in leveraging data-driven solutions for operational efficiency and compliance. Specializing in asset management and analytics, she has been instrumental in integrating IBM's Maximo Asset Management system with existing infrastructures, enhancing both preventive maintenance and regulatory adherence.

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