Senior Technical Engineer - Biogas Upgrading

Type: Full-time	**Location:** Louvain-la-Neuve, Belgium	**Travel:** Regular, project-based

About ARK Capture Solutions

ARK Capture Solutions is a cleantech company providing versatile and affordable decarbonization solutions. Our mission is to fight climate change by unlocking carbon capture technology and avoiding the release of carbon dioxide into the atmosphere at point-source emissions.

Job Summary

ARK is looking for a senior engineer with proven technical expertise in biogas upgrading and biomethane production to take near-autonomous ownership of complex technical projects, from early customer discussions and concept design through engineering, procurement support, installation, commissioning, and performance validation.

In this role, you will be a key technical and project pillar for ARK in the renewable gas sector. You will translate customer needs and site constraints into robust process solutions, coordinate internal and external engineering work, guide suppliers and contractors, and ensure that project scope, quality, budget, and schedule remain under control.

We are looking for someone who already understands biogas upgrading technologies, gas separation, CO_2 removal, methane enrichment, feed-gas variability, compression, drying, safety, and commissioning challenges. You should be comfortable taking the lead with clients, operators, suppliers, and multidisciplinary teams, while still enjoying hands-on technical problem solving. This role could rapidly lead you to manage a team fully dedicated to biogas upgrading.

This is an opportunity to combine deep sector expertise with a high level of ownership in a fast-moving cleantech company, and to help ARK expand its impact across renewable gas, carbon capture, and industrial decarbonization projects.

Key Responsibilities

- **Project ownership:** Lead biogas upgrading projects with a high degree of autonomy, from proposals, handover after sales through engineering, delivery, commissioning, and close-out. You keep control of scope, schedule, budget, technical quality, risks, and stakeholder alignment.
- **Process and technology leadership:** Define and review process concepts for biogas upgrading and biomethane production
- **Engineering coordination:** Coordinate multidisciplinary engineering activities, including process, mechanical, electrical, instrumentation, automation, civil, and safety inputs. Ensure that design decisions are practical, documented, and aligned with project requirements.
- **Customer interface:** Act as a trusted technical counterpart for customers. Understand their operational constraints, explain design choices, manage technical expectations, and lead project-related discussions with confidence and clarity.
- **Supplier and contractor management:** Prepare and review technical specifications, support procurement, evaluate supplier proposals, coordinate package interfaces, and follow up on quality, delivery, and technical compliance.
- **Commissioning and performance support:** Support installation, pre-commissioning, commissioning, start-up, troubleshooting, and performance testing. Use field feedback to improve future designs and execution methods.
- **Risk, safety, and compliance:** Contribute to HAZOPs, risk reviews, permitting inputs, safety documentation, and compliance with applicable codes, standards, and customer requirements for gas and renewable energy projects.
- **Continuous improvement:** Capture lessons learned and identify opportunities to improve ARK project execution, process performance, reliability, energy efficiency, maintainability, and total cost of ownership.
- **Documentation and reporting:** Produce and maintain clear engineering deliverables, project documentation, progress reports, technical notes, design reviews, and decision logs.

Qualifications

- **Education:** Master's degree in Engineering, Mechanical Engineering, Industrial Engineering, Chemical Engineering, Energy Engineering, or a related technical field.
- **Experience:** 6+ years of relevant experience in biogas upgrading, biomethane, renewable gas, gas treatment, process packages, EPC projects, or closely related industrial energy projects.
- **Sector expertise:** Strong practical knowledge of biogas upgrading technologies and associated balance-of-plant systems.
- **Project execution:** Proven ability to lead technical projects with significant autonomy, manage priorities, coordinate teams, interact with customers, and keep projects moving in a structured way.
- **Engineering fundamentals:** Strong understanding of mass and energy balances, PFDs, P&IDs, equipment sizing, instrumentation philosophy, controls, safety reviews, and site integration.
- **Commercial awareness:** Ability to balance technical excellence with cost, schedule, reliability, contractual scope, supplier constraints, and customer expectations.
- **Communication:** Excellent written and verbal communication skills in English. French and/or Dutch is a strong plus.
- **Mindset:** Autonomous, pragmatic, hands-on, structured, and comfortable in a fast-paced start-up environment where priorities evolve and ownership matters.

What We Offer

- A senior role with real ownership over strategic projects in renewable gas and industrial decarbonization.
- The opportunity to build and shape ARK capabilities in biogas upgrading and biomethane project execution.
- A multidisciplinary team where engineering, technology, customers, and field reality meet every day.
- A dynamic cleantech environment with short decision lines, high autonomy, and direct climate impact.
- A competitive package, including stock option, meal vouchers and homeworking. A company car may be provided depending on the seniority

How to Apply

Please send your resume and a short note explaining your experience in biogas upgrading or renewable gas projects to **info@arkcapturesolutions.com**.