

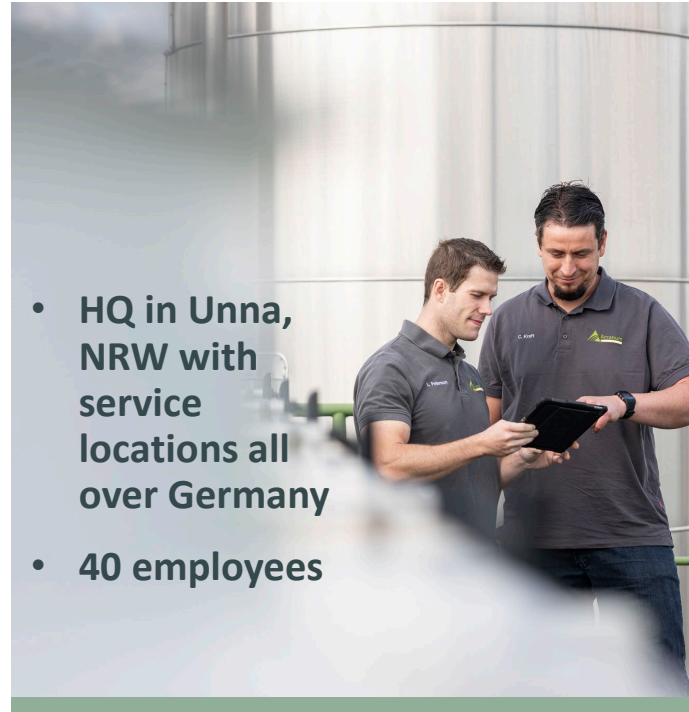


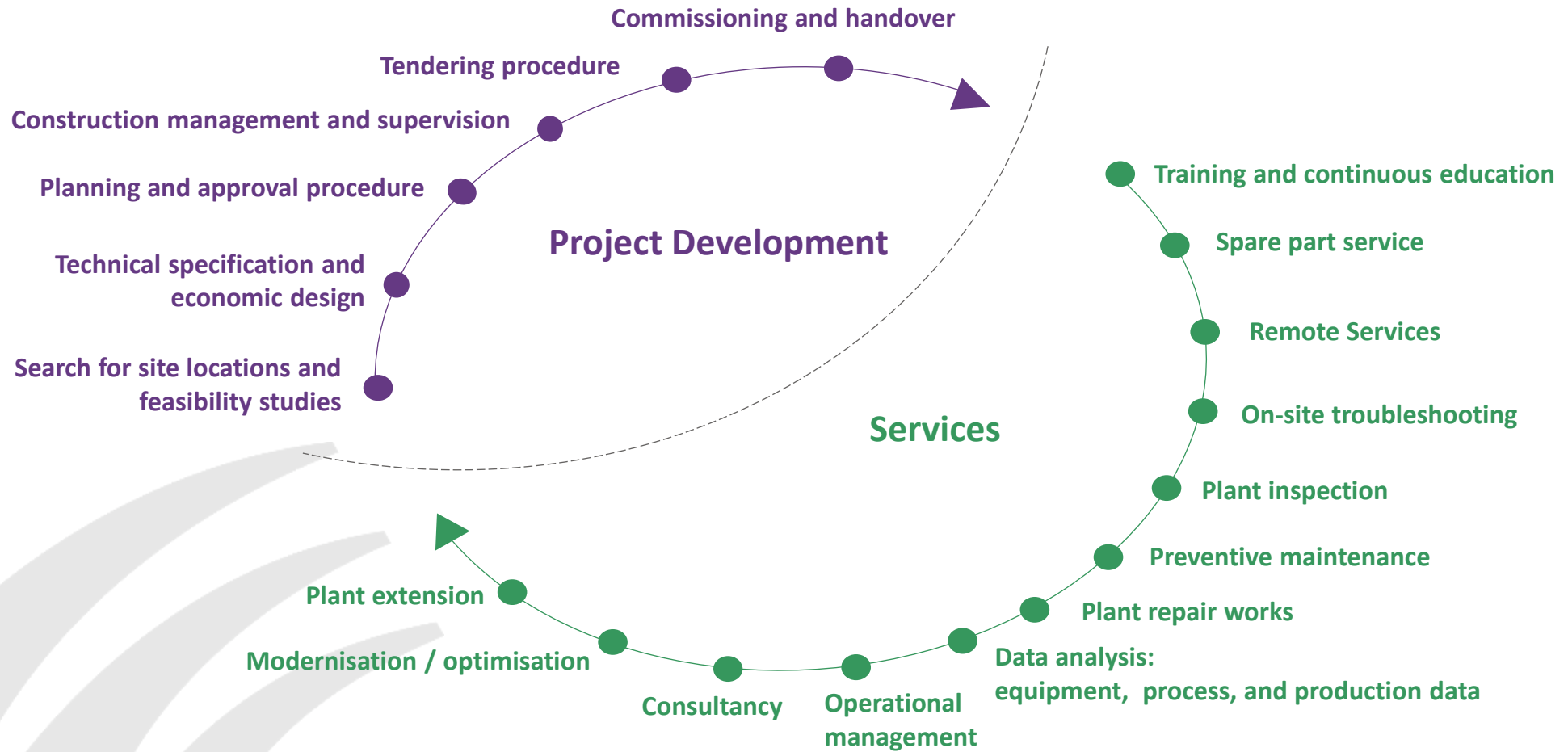
Practice-oriented solutions for renewable gases Biomethane, LNG, CNG, Hydrogen and Power-to-X

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Company profile: ARCANUM Energy Systems GmbH & Co. KG







Agricultural holdings
Genuine biogas production at multiple locations

Biogas Pool for Municipal Utilities

Joint investment by municipal utilities in the production of biomethane



Biogas Pool
Biogas upgrading (biomethane and grid injection)



Municipal Utilities
Utilisation of biomethane

Biogas Pool 1 for Municipal Utilities: Bruchhausen – Vilsen



→ **ARCANUM: operational and company management**

Service with the knowledge of a plant manufacturer and the experience of an operator



Project planning & development

From idea to commissioning

- ▲ Market and location analysis
- ▲ Technical + economic design
- ▲ Financing (e.g., participations, funding)
- ▲ Approvals
- ▲ Project tendering and construction supervision
- ▲ Startup and operations



Plant Management & Sales Market

We focus on the profitability of every plant

- ▲ Technical + commercial management (control room)
- ▲ Operation + Maintenance + 24/7 service for upgrading and grid injection plant
- ▲ Data analysis and process optimisation (I.D.E.R.)
- ▲ Modernisation and plant expansion
- ▲ Certifications and approvals acc. RED II
- ▲ Plant design in line with legal framework European Renewable Energy Directive II
- ▲ Gas commercialization and GHG quota trading

Upgrading Technologies

Biogas upgrading

- ▲ Chemical scrubbing
- ▲ Physical washing
- ▲ Pressure swing adsorption
- ▲ Membrane separation

Main Manufacturer

MT, Cirmac, Purac, Haase, Ros Roca, Schwelm, Carbotech, Malmberg, Pentair Haffmanns

Membrane separation



Chemical scrubber



Water scrubber



Comprehensive services in the field of green gases

- ▲ **Concept development decarbonisation**
- ▲ **Investment & participation management**
- ▲ **Market analysis**
- ▲ **Project development & control**
- ▲ **Planning & approval**

- ▲ **Cooperation within the NEA group:**
 - **Hytron:** Plant construction steam reformers & electrolyzers
 - **Alternative Energy Driven Solutions:** transportation concepts
 - **Hofer:** H₂-fuel station construction



Please feel free to contact us:

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