



# **Analysis of factors influencing the efficiency of biogas projects (Consultant`s view)**

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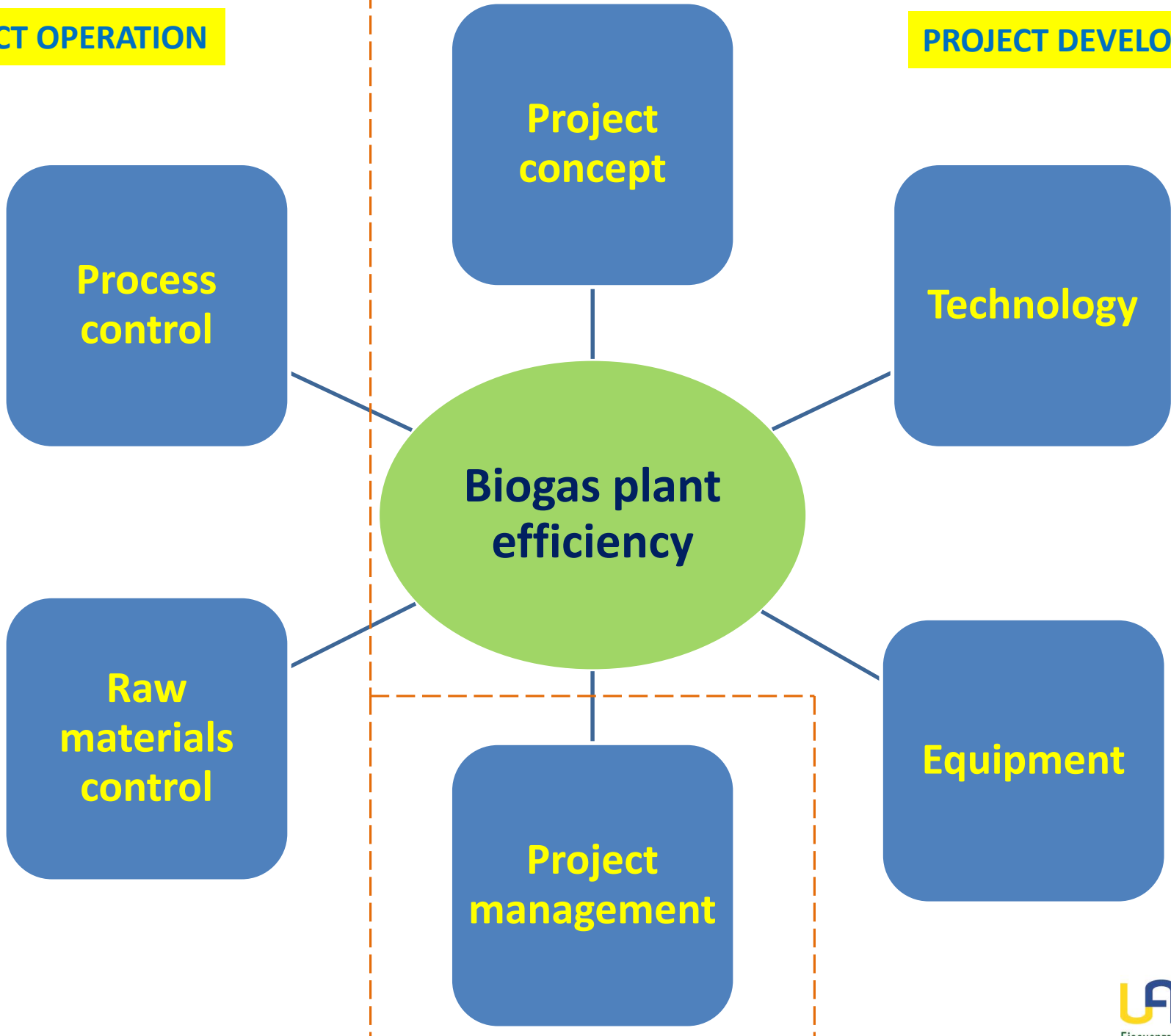
IV seminar «Sustainable Agribusiness Forum(SAF)»

Efficient operation of biogas plants,

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**PROJECT OPERATION**

**PROJECT DEVELOPMENT**



**Project business  
concept**

**Technology**

**Equipment**

**PROJECT  
DEVELOPMENT**

**Object selection  
and raw material  
base analysis**

- The choice of the main **guaranteed supplier** of raw materials
- **Long-term contract** for the supply of raw materials
- **Analysis of the raw material** base in the nearby
- **Research** of selected types of raw materials on physical and chemical characteristics and **biogas potential**

**Transparent  
independent  
consulting**

- **Feasibility study** with analysis of all possible project and business options and sensitivity of economic indicators
- **Comprehensive analysis** of technological solutions and commercial offers
- **Business plan** for an optimal project

**Choice of  
contractors**

- **Choice of technology provider** based on the results of the feasibility study, complex analysis and study of its reference objects
- **Selection of experienced contractors** for design and construction work
- Concluding a separate contract for the **biological start-up** with a technological procedures and guaranteed terms

**Control of raw materials composition and biogas potential**

- **Regular quality control of raw materials:** organic content, inhibitors, nutrients, biogas potential
- **Efficient management of raw materials flows** based on the results of its quality control
- **Binding of the cost of raw materials** to the energy equivalent of its **biogas potential**

**Control of process performance parameters**

- **Regular control of liquid phase** (organic matter, pH, FOS / TAC, N-NH<sub>4</sub> ...) in plant's laboratory or outsourcing
- **Flow control of gas phase** (biogas yield and composition)
- **Systematization and archiving the data**

**Process efficiency analysis and optimization**

- **Contract for biological support** of biogas plant
- **Periodic monitoring of the efficiency** of technological processes based on data of operation and quality control of raw materials
- **Scientific and technical justification** of optimization needed
- **Regular training of operators**



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