



## **MELDOM Energies**

### **Study of feasibility of the valuation by methanation of the organic waste on the territory of XXX**

#### **STAGE 1: fields of waste and organic effluents and needs in therms**

**Synthesis of the studies on the waste and the effluents already realized by the territory of XXX.**

**Definition of the field of organic waste (solid, pasty and liquid) on the territory of XXX, including the green waste, muds of STEP and the animal by-products.: Type of products, nature (liquid, solid, pasty, etc.), statutory classification (code waste and code under animal products), producer, place of production, produced quantities, seasonality, current outlet.**

**Physico-chemical characterization of the waste (MS, COT and DCO, N, P, K, Metals tracks, density, size grading.**

**Synthesis, with 10 index forms of conversations with producers of waste and 10 index forms of physico-chemical analyses**

**Definition of needs in therms on the zone:**

**Identification of the consumers of therms, nature of needs (warm air(sight), warm water, vapor, etc.), characterization of needs (per working day, a month, etc.).**

**Current mode of production, date of the investment or the remaining life cycle of the equipments of production, production costs, etc.**

**Evaluation of the possible medium-term needs ( 5 - 10 years).**

**Synthesis, with 5 index forms of conversations with consumers of therms.**

#### **STAGE 2: technical and economic evaluation of solutions of methanation**

**Definition of the type of waste and effluents retained for the methanation.**

**Nature and origin of organic matters retained with justification of choices.**

**Constraints of mobilization, seasonality, mode of collection and flows of transport.**

**Definition of the reception and the pretreatment of the waste and reserved effluents**

**Principal plan**

**Description of the main equipments**

**Definition of the type of methanation, following the exploitable field**

**Description of the process**

**Sizing of the méthaniseur (total volume, hydraulic volume, time(weather) of hydraulic retention).**

**Balance sheet material of the methanation**

**Definition of the treatment and the valuation of the biogas**  
**Type of valuation (production heat or cogeneration)**  
**General plan**  
**Description of the main equipments**  
**Energy balance**  
**Definition of the treatment of the digestat**  
**Type of treatment**  
**Principal plan**  
**Balance sheet material**  
**Valuation and/or elimination of the generated products**  
**Definition of the potential places of setting-up (according to the field), the needs in terms and possibilities of connection to the network.**  
**Estimation of the investments following the hypotheses**  
**Cost estimate of functioning**  
**Estimation of the schedule of realization**

**General synthesis**

### **STAGE 3: legal and financial Sector**

**Study of the statutory constraints of town planning following the places of setting-up and the estimated technical solutions.**  
**Study of the statutory constraints environment following the places of setting-up(presence) and the estimated technical solutions.**  
**Estimation of the investments following the technical hypotheses.**  
**Cost estimate of functioning.**  
**Evaluation of the possibilities of financing (public, partner helps(assistants) deprived, etc.)**  
**Study on the possibilities of realization (key in hand, grouping of company, AMO, etc.) and of exploitation(operation) of the unit (private, public, granted exploitation etc.)**  
**Study on the carrier of project and legal assembly which can allow to cross in the phase engineering (municipality = > procurement contract, GIE, transfer of the feasibility study in a private or a private structure ad hoc, etc.)**