# Biogas Plant

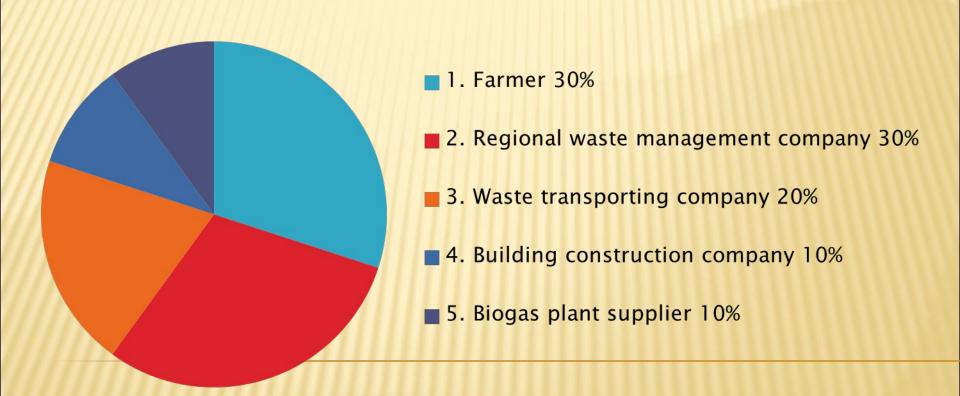
# Heat, Power and Fertilizers from Biowaste

CASE STUDY

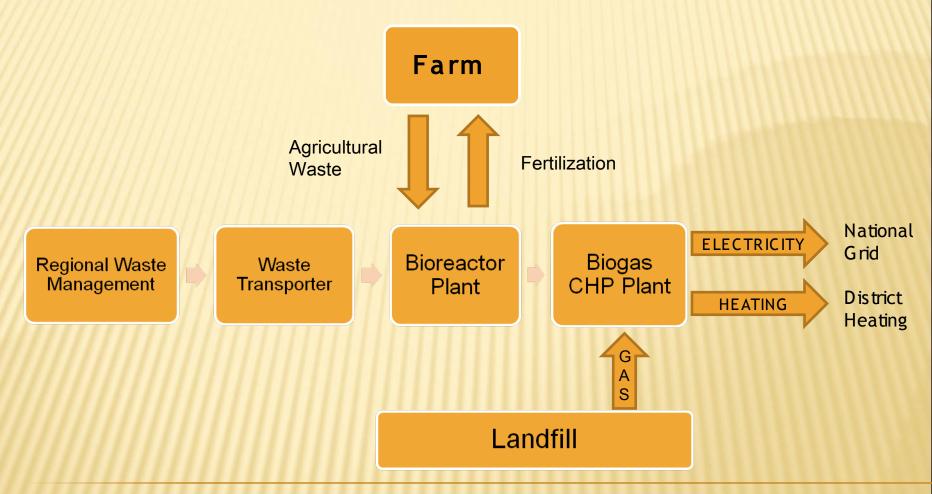
15.6.2010 Bucharest, Romania

Hannu Hirvonen Maria Hällback Mirkka Hiltunen Rezarta Marjeta

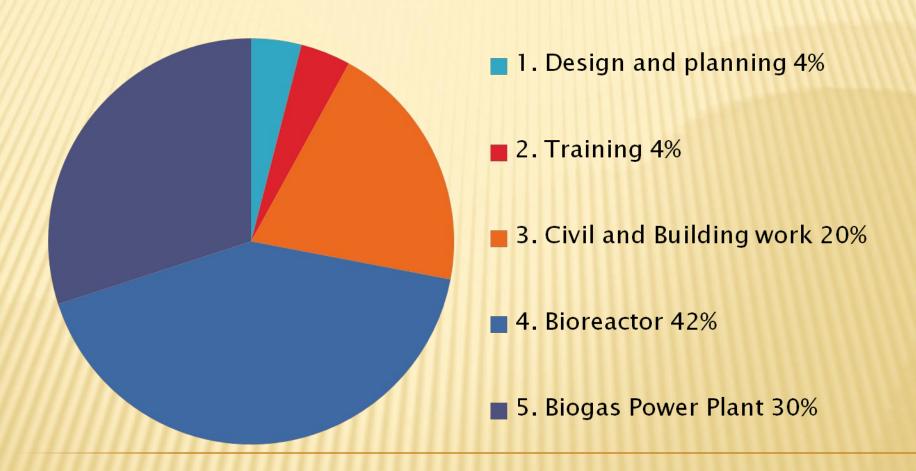
# Establishment of Biogas Company - Example Setup of Shareholders



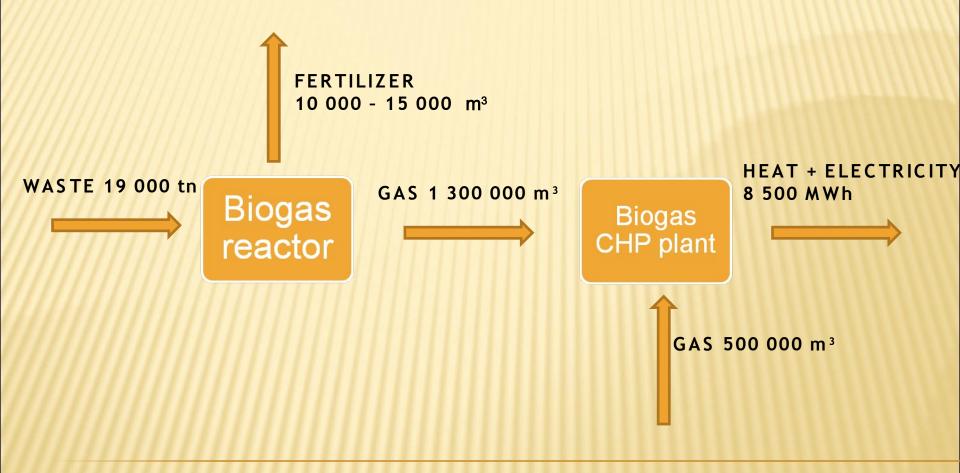
# PROCESS SCHEMA



#### Cost Breakdown - Total 5 MEUR



## Material and Energy Flow per Year



#### PROJECT FINANCING

Share capital

0,7 MEUR

 Investment aid of Finnish Government (grant)

**3,5 MEUR** 

Commercial, retail bank loans

0,8 MEUR

**Total 5,0 MEUR** 

#### PROJECT TIMELINE

29.2.2008 Environmental permit granted

Spring 2009 Start of earthmoving and foundation work

Spring 2010 Operation started

#### FINANCING SIMILAR PROJECTS IN ROMANIA

Design and planning

**Training** 

Civil and building work

Bioreactor

Biogas CHP plant

0,2 MEUR NOPEF\*)

0,2 MEUR ESF \*\*)

1 MEUR

2,1 MEUR

1,5 MEUR

Total 5 MEUR

#### NOPEF

#### Objective

- \*Nordic Project Fund NOPEF supports Nordic cooperation within the framework of its mandate.
- \*The specific aim of the fund is to strengthen the international competitiveness of Nordic enterprises by providing co-financing for feasibility studies that support export projects and the internationalization of Nordic enterprises.
- \*Cooperation with national, Nordic and international organizations.

#### Interest-free loans - Supporting grants

- \*Nopef may participate with up to 40% of the approved feasibility study costs in connection with international business set up
- \*The loan is converted into a grant after the final project report has been approved.

### **ESF**

- \* The European Social Fund (ESF) is one of the EU's Structural Funds, set up to reduce differences in prosperity and living standards across EU Member States and regions, and therefore promoting economic and social cohesion.
- \* The ESF is devoted to promoting employment in the EU. It helps Member S tates make Europe's workforce and companies better equipped to face new, global challenges. In short:
  - Funding is spread across the Member S tates and regions, in particular those where economic development is less advanced.
  - It is a key element of the EU's 2020 strategy for Growth and Jobs targeted at improving the lives of EU citizens by giving them better skills and better job prospects.
  - Over the period 2007-2013 some €75 billion will be distributed to the EU Member States and regions to achieve its goals.

# Collaboration possibilities between Romanian and Finnish companies

Information about collaboration possibilities can be found from the following entities:

1. Finnish Embassy in Romania www.finlandia.ro

## Collaboration possibilities

(continued)

#### 2. Finpro www.finpro.fi

Finpro is an association founded by Finnish companies. The clients are Finnish companies at different stages of internationalization. Finpro's aim is to guarantee that Finnish companies, especially small and medium size companies, have access to high quality, comprehensive internationalization services around the world.

#### **THANK YOU - KIITOS**



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Information on collaboration and financing

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