

COMPLEX FOR PROCESSING AND RECYCLING OF AGRICULTURE WASTE

Executive summary

Establishing specialized complexes for waste recycling and disposal of agricultural production using the technology of obtaining energy from biomass plant.

Contact Information

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Industry

Energy
Agricultural

Development stage

startup

Year founded

2011

Funding Opportunity

EUR 15,909,508

Use of Fund

73,16% Equipment
11,69% Construction
13,1% Production
2,04% Legal/Other

Revenue

EUR 6,126,840
annually

Existing Debt

EUR 0

Existing Investors

N/a

PROBLEM / OPPORTUNITY

For most remote regions of Ukraine (Polesie, Bukovina, Carpathian), a serious constraint to economic development is the absence of free power capacity and cheap of alternative supply energy resources: electricity, gas and heat. For this reason, in these regions (rural areas or cities with a population of 5 - 20 thousand inhabitants), it is impossible to recreate the objects of agricultural processing, construction or extracting industry.

Production of synthetic gas, heat and electric energy from the biogas received at fermentation of specially grown up agricultural crops: corn, sorghum, long-term grasses, - allows to create highly effective industrial complexes with capacity in 1-6 MW in an electric equivalent.

That allows us to solve economic and social problems of depressed agricultural areas of Ukraine, with a population from 2 to 4 million rural population and residents of small towns.

SOLUTION / PRODUCT

The essence of the proposed project is to establish three specialized complexes for waste recycling and disposal of agricultural production using the technology of obtaining energy from biomass in Zhitomir region of Ukraine.

POTENTIAL RETURN

Initial investments can be fully returned within 5 years.

COMPETITION

Ukraine does not have the complexes for the recycling of agricultural waste to produce energy in Ukraine for industrial scale.

There are several complexes for disposal of animal waste and agricultural processing. Company "Zorg" has Large complex for disposal of animal waste just only for own needs. A number of similar complexes are in the stages of design and construction.

EXECUTION PLAN

The project involves the phased implementation of the project:
Phase 1: purchase, installation and commissioning of the first specialized complex for processing and recycling of agricultural wastes, with a capacity of 2 MW, in Zhytomyr region in the first quarter of 2012. The phase 1 is planed to start in first quarter of

2011.

Phase 2: purchase, installation and commissioning of the second and third specialized complexes for processing and recycling of agricultural wastes, with a capacity of 2 MW each, in Zhytomyr region in the first quarter of 2013. The phase 2 is planned to start in first quarter of 2012.

Sales of products:

• The Sales of electric power is planned to "State energy company". In accordance with the Law of Ukraine - "On alternative sources of energy" 20.02.2003, № 555-IV (about "Green Rates"), the cost of electricity that was obtained by processing of Green biomass is 12,2 EUR cents for 1 KW/h.

• Implementation of the thermal energy will be through the state enterprise "Forestry", domestic consumers are located near industrial plants consume heat energy.

• Implementation of organic fertilizer through the "PROMT-service" company that provides us with biomass for this project, to improve soil fertility and increase crop yields. Also for farmers who are manufacturers of ecologically clean agricultural products.

The project already has:

- agriculture land, 2 000 ha for maintenance each of specialized complexes, in the long-term lease for 49 years;
- the contract for equipment supply company «EnviTecBiogas» and production start-up operations in accordance with the terms of the project;
- the agreement for the purchase of thermal energy by enterprise "Forestry" and biogas by LLC "Basalt technology".

The presence of considerable empty and uncultivated agriculture land, allows to schedule to increase installation of power generating capacity through the construction of similar units in the complex processing and utilization of agricultural waste.

The Parliament of Ukraine is developing State program about the improve energy independence depressed regions of Ukraine.

Also our company is conducting the studying three prospective sites for similar facilities for the reclamation of agricultural waste to produce energy in the Chernihiv region of Ukraine.

TEAM

Aleksandr Malis, director of investment consulting company "Maximum IPIC».

Experience in the State company to promote foreign investment.

Anatoly Witkowski, experience in leadership positions, including 15 years chairman of the village council (Zhytomyr region of Ukraine).

FINANCE

The project requires an investment of EUR 15,909,508 (for installation of three specialized complexes for processing and recycling of agricultural wastes).

Among them: the cost of equipment - EUR 11,640,000 (73.16%), construction services - EUR 1,860,000 (11.69%), contingency costs - EUR 324,774 (2.04%), production costs - EUR 2,084,764

(13.1%).

Payback Period: 5 years.

The expenditure part

- Raw materials (for one specialized complex per year) - EUR 340,000;
 - Payment of staff (one specialized complex per year) - EUR 28,000;
 - Maintenance and routine maintenance (one specialized complex per year) - EUR 276,000;
 - Construction works (one specialized complex) - EUR 620,000;

 - First year: setting the first specialized complex - EUR 4,842,618.18.
 - Second year: setting the second and third specialized complexes, operation and maintenance of the first specialized complex - EUR 9,142,000.
 - Third year: operation and maintenance of the three specialized complexes - EUR 1,014,000.
 - Fourth year: operation and maintenance of the three specialized complexes - EUR 1,014,000.
 - Fifth year: work and maintenance of the three specialized complexes - EUR 1,014,000.
- Total cost: EUR 17,026,618.2

The revenue part

the sale of electricity by "Green Rates" (excluding taxation, and excluding income from the sale of thermal energy and organic fertilizer):

First year: EUR 0000.

Second year: EUR 1,700,900.

Third year: EUR 5,446,080.

Thurs. year: EUR 6,126,840.

Fifth year: EUR 6,126,840.

Revenue for the five years from the sale of electricity by "Green Rates": EUR 19,401,660.

The investor is invited to be co-founded the company with a share of 50% -1 share, and shall have priority to payback of their investment until the end of investment agreement. Also, it is possible additional agreement on the joint continuation of this project.