National Project “Biomass energy”

“Biomass Energy” is a project portfolio to harness the energy lost during the decay of biological waste products and to turn it into electricity and heat energy. According to experts the total market value of bioenergy projects in Ukraine today has been evaluated at US$ 2.7 billion thus there are all the conditions to create a network of bioenergy facilities with total capacity of 400 MW of electricity and 9000 MW of thermal energy.

Project summary

The portfolio of projects within “Biomass energy” are designed to develop a bioenergy industry in Ukraine through the implementation of bioenergy technology and the purchase of equipment for the municipal and industrial generation of heat and electrical energy. By investing in these projects the participants will be entering into a new and highly promising market.

These bioenergy projects are for the production of green heat and electricity including upgrading of existing facilities and the construction of new facilities to give:

- A combined heat and power (CHP) from 1MW to 10 MW electrical power.
- Biogas plants from 0.1 MW to 6 MW of electrical power.
- Industrial boilers from 1MW to 50 MW of thermal power.

Project Background

The diversification of natural gas supply and the reduction of imported gas consumption through improved energy efficiency are the areas of strategic importance to Ukraine. As a part of this program renewables are taken on a new level of importance. Ukraine has sufficient biomass material in the form of waste straw, wood and other biodegradable agricultural materials to produce an estimated 30 million tons of oil equivalent every year.

Implementing only a quarter of this potential through the harnessing of bioenergy technologies can substitute around 6 billion m³ of natural gas per year by 2015, reduce greenhouse gas emissions by 13 million tons of CO₂ equivalent per year and create thousands of new jobs in agriculture, energy and the downstream industries.

Major opportunities for market entry

Ukraine has an annual economic potential of biomass which is equal to around 30 million tons of oil equivalent. To date this simply goes to waste.

This potential could:

- Satisfy over 14% of Ukraine’s primary energy demand.
- Substitute up to 70% of Ukraine’s imported natural gas
- The following conditions created to enable the realization of this potential:
  - The state has created a specific “feed tariff” system for all energy created by alternative means. This tariff is guaranteed until 2030, which allows producers to sell electricity significantly higher than the normal electricity tariff.
  - The cost of heat energy from biofuels is significantly lower than from natural gas.
  - The state has established a number of customs and tax exemptions specifically for the bioenergy industry.
  - Ukraine ratified the Kyoto Protocol in 2004.
  - In Ukraine there are International and European institutions that are prepared to consider financing the implementation of bioenergy projects including: the World Bank, EBRD and IBRD.
Investment parameters

State support
The government will:
- Finance 100% of the project feasibility study.
- Give high level assistance in the purchase or leasing of land and all necessary administrative licenses and permits.
- Guarantee an economically viable and stable “feed tariff” pricing policy.

Investment level
The total volume of investment is estimated to US$ 9.5 million. The total level of investment will be confirmed after the project feasibility study to be completed and accepted by all parties, however the State has already begun to implement the pre-investment stage at its own expense.

Payback period
The payback period is estimated at 5 years.

Investment mechanism
A public-private partnership with private investment and long term project finance.

Initial pilot project
- Mini-CHP on biomass in Kiev region to generate up to 10 MW of heat and 2 MW of electric energy using the following model:
- Develop a mechanism of a typical project - from pre-investment to commissioning.
- Quickly find local partners for further development and replication technology projects.
- Streamline regulatory framework to stimulate further investment.

Location
Pilot project in Kyiv region with a long term roll out all over Ukraine.

Project Timing
Pilot project realization - up to 1.5 years.

Investment in this new “Biomass energy” portfolio of bioenergy projects is an informed choice, as you will be the first in the market, have a reliable partner that is interested in your success and you will have the full support of the state.

As a result - you can build a profitable business.

Welcome to cooperation in the “Biomass energy” project.

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