Question: If you have a $5 million capital made available to you, how, where and why would you spend it to set up a new energy business? Please prepare a sound business statement, acceptable to financiers, and plan for consideration by the jury.

Answer: Biomass (pellets) distribution and production in the Odessa region, Ukraine

Background

The biomass (pellets particularly) production has grown as a business in Ukraine in 2008.

The reasons for this are diverse, comprising the rapid prices growth for natural gas and unstable resources flow, just to name a few. Over the period of the last five years up to 90% of the output products were exported abroad.

At the beginning of 2013 pellet solid-fuel boilers entered the market, thus creating demand for the further biomass production. As for the 2015 summer statistics, the number of the pellets manufacturing plants has risen beyond 300, what signalizes about the biomass promotability.

There is already a good number of solid-fuel boilers manufacturing in Odessa city, Ukraine. As compared to 2014 the output volumes have risen more than by five times.

But, there is pellets shortage despite the fact that Odessa region is very rich for agricultural raw materials. According to the recent statistics, there is a huge deficit in solid fuel. This is because 90% of the fuels is imported.

The issue: Biomass (solid fuel = pellets) shortage.

The solution: Improving supply and logistics facilities and new plants construction.
**Distribution ways:** Direct sales and sales via Energy Service Contracts (ESC) model.

The ESC model is expected to become relevant to governmental facilities as the last experience high budget gap and financed by third parties energy modernization campaigns are seen to be the most effective way for energy efficiency policies further conduction.

**2015-2016 heating season forecast**

During the 2014-2015 heating season over 10K tonnes pellets were consumed. These statistics were collected from market traders and solid fuels salespersons.

According to the preliminary estimates the number of produced and sold solid fuel boilers has increased by 5-7 times as compared to the 2014 statistics. Based on this the demand for pellets will increase up to 50 K tonnes during the 2015 heating season.

Assuming that our business plan is realized it is expected to cover up to 20-30 percent of the market demand, which amounts 30-50K tonnes of pellets per year.

**The stage one** includes only imported pellets further shipping and distribution. This stage is important for consumer market formation and its tracking and surveillance.

During this stage, the expenses include storage fees (approximately $75K per year), labour expenses (approximately $45K), shipping costs (approximately $85K per year).
The point of return is at the amount of 550 tonnes of sales. The expected net revenue amounts to $10 per tonne. The expected amount of sales volume is 8000 - 10 000 tonnes, thus the expected revenue varies from $74 500 to $94 500.

At the end of the stage one, the project appraised value mounts up to the sum of $300 K.

**The stage two** includes pellets producing plants construction and the product distribution campaigns.

Besides solid fuel distribution this stage also includes solid fuel production starting from the amount of 10K tonnes per year; installation and operation of boiler stations with 150 kW of power and higher; boiler equipment trading with targeting for the private sector.

It is expected that at the end of the stage one the project appraised value will mount up to the sum of $5 000 000.

*Note:* Here are included expenses for services provided to governmental institutions on the basis of Energy Service Contracts.

**The stage three** is expected to bring the project to the top leading companies in the region, which specialize in the sphere of energy efficiency and alternative energy sources. The company is expected to cover up to 20-30 percent of the market demand amounting to 30-50K tonnes per year, thus lower conventional energy sources consumption, promote alternative energy sources and reduce dependence on imported energy resources as well as become a profitable investment project.