High technology Green house presentation

- Business Synopsis
  - Hydroponic production.
  - GATES Production System.
  - Use of Renewable Sources.
  - Pro market Active Sales Agreements.
Mission Statement

- The Venture mission is to produce locally health safe and, fresh vegetables by developing and operating high – tech greenhouses.
- Be a key player in the growing greenhouse products industry.
- As a developer and as a grower.
- Develop state of the art greenhouses.
- Produce high quality products.
Fostering Controlled Environment 21st Century Agriculture.

- Promoting controlled environment agriculture practices for the creation of local high tech greenhouse farming industry.
- Aiming to reduce vegetable import while creating high tech jobs in the area by exploiting local environmental conditions and resources.
- Advanced cultivation techniques will be utilized in the project to ensure increasing product quality, high yield, and low cost, enabling high margins and sustainability.
Technology

The major key technologies are:

- Intelligent Environment and crop control.
- State of the art high tech cultivation systems.
- Intelligent energy management and efficiency.
- State of the art industrial greenhouses
Science Behind the Method

- Be a leader in agricultural research and developing improvements in greenhouse production technology.
- Our applied research division continues to invest resources in the areas:
  1. Climate Engineering,
  2. Plant Biology & Pathology,
- Our team for almost twenty years, has been at the forefront of technological greenhouse innovation by developing creative solutions in challenging climatic environments.
- We have achieved and documented record for high yield.
APPLYING RESEARCH DIVISION
Greenhouse Production System

(Greenhouse Advanced Technology Expert System)

- GATES 365 day production of high quality fruit providing 100% fulfillment of customer requirements.
- GATES contained environment excludes all outside pests while inside pests are controlled with IPM (Integrated Pest Management), making GATES production 100% insecticide free.
- GATES production levels are 60% higher than average greenhouse production.
- GATES yield 20-30 times more product per acre than conventional field production.
- GATES technology achieves lowest price per kg in the industry today.
- GATES uses 100% of water with no waste and recycles 100% of irrigation drainage to conserve water and fertilizer.
- GATES is designed to use waste heat to warm the greenhouses.
Greenhouse Advanced Technology Expert System

- GATES is designed to recover CO2 from boiler and power plant exhaust to utilize plant for increasing crop growth.
- GATES uses 3 types of evaporation to cool and humidify the greenhouse.
- GATES water efficient growing system for tomatoes requires 1/7th of water usage, compared to field grown tomatoes, further translating into an 86% savings in water usage.
- GATES has the most sophisticated plant monitoring available, including cameras, plant temperatures, water uptake, and growth rates. These measurements are all minute by minute in real time.
- GATES uses the plant measurements and software models to fine tune the greenhouse conditions.
- GATES technology can be transferred to high density population centers, therefore, reducing ‘food miles’ and thus the overall carbon footprint.
- GATES can harvest solar power from excess sun radiation and convert to electricity.
Market Summary

- Tomatoes are mainly produced in open field and old tech-poly film greenhouses.
- Climate change resulting for bad quality and low productivity, do not allow feasible open field or low tech greenhouse cultivation.
- Excessive use of pesticides and growth inhibitors in those cultivations results in high quality of chemicals residues in products.
- Market - consumers demand “health safety” products
Location

- Close to Russian market.
- Natural Gas connection.
- Geothermal potential.
- Biomass potential to be used as energy supply and energy conversion to synthetic diesel.
- Large Market Demand.
- Stable economic environment.
- Relative low labor cost
Opportunities

- Market in Europe and US show a great preference to an absorption of "health safety" greenhouse products.
- Retail pricing for "health safety" products is significantly higher.
- So far, higher price is not a barrier to consumers.
- Market growing prices and unchanged annual production show a great demand potential to exploit.
- Institutional investors seek for high performance and low risk investment.
Business Concept

- Our intention is to develop turn key industrial greenhouses project and promote them to investors.
- Develop and operate the units while the investors have a majority share on those.
- To achieve higher performance and minimize risk - will develop a central management infrastructure which will allow for precise control of the operation.
- Handle distribution of the product in order to assure sales and maximize profit for the investors.
- Management: The corporate management will be handled mainly by the highly experienced members of our team.
Competition

- As this is a unique concept there is no actual competition.
- We can offer a unique combination of technology and concept which is not available in the market yet.
- We estimate competition will show after a couple of years but with an aggressive and competitive policy we can maintain leadership position.
- In the area of plain project development our team is a leader.
Goals and Objectives

- Develop internal infrastructure which will support our target growth.
  - Business Process –
  - Human Resources –
  - Equipment
- Build Up Global Strategic Alliances with:
  - Financial Institutions
  - Equipment suppliers
  - Subcontractors
  - Solution Providers
  - Distribution
- Build an increase value of market potential
- Grab 15% market share of local market by 2020.
Recourse Requirements

- We have to thoroughly work on the following:
  - Personnel
  - Technology
  - Finances
  - Distribution
  - Promotion
  - Products
  - Services
High tech greenhouse (10 ha.) investment including 4,8 Mwel CHP unit in Alexandria Greece.
Greenhouse pictures and products
Faces of work implementation

“Biological protection”
- Use of useful insects against pathological diseases
- Minimizing the use of chemical products for plant protection

Useful tools:
- Specifications for the Management of the plant’s.
- Weekly control.
- Orthogonal use of inactive elements.
- Database Chemical Applications, trace and localization.
Risks and Rewards

- There is no grate risks as the concept is thoroughly engineered and we have been there in the past.
- Market fluctuation are not estimated to be a risk as there is a grate demand.
- Potential market pressure will reduce sales pricing but not at a risky level.
- Governmental fluctuations in policy might not effect schedules due to foreign financing.
- Grants and Incentives are available by using the development low, may have a delay but without affecting the project implementation.
- The project it self is a fruit full operation.
Key Issues

- Sort term
- Secure initial investors in order to walk on stable ground for the first years.
- Not waste time with "wanabe" low profile investors.
- Target West European Investment Founds
- Long Term
- Develop internal company infrastructure
- Infrastructure is the key to the soundness of the whole project.
FINANCIAL PLAN

- In order to achieve our goals we will provide technical and financial solutions based on Turn Key Project.
- We can provide financing up to 85-90% of the project face value based on leasing with low interest (~3%-4%). The rest must be Own Equity in form of cash or bank guarantee and in case that will not be able then,
- We can provide all needed studies and permit’s in order to apply for local subsidies and incentives.
- Each project can be self sustained. Profits from development are near required capital share.
- Actual revenues will be expected on 3rd / 4th year after cashing dividends from the investors.
Financial Highlights

The costs consist primarily of the following project costs:

- Planning Cost
- Production of needed permits
- Approval Procedures
- Capital Building and Equipment costs
- Start up costs, training
- Financing costs
- Operating costs
- Personnel costs
- Supplies and material costs
- Administrative costs
- Insurance and associated costs
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